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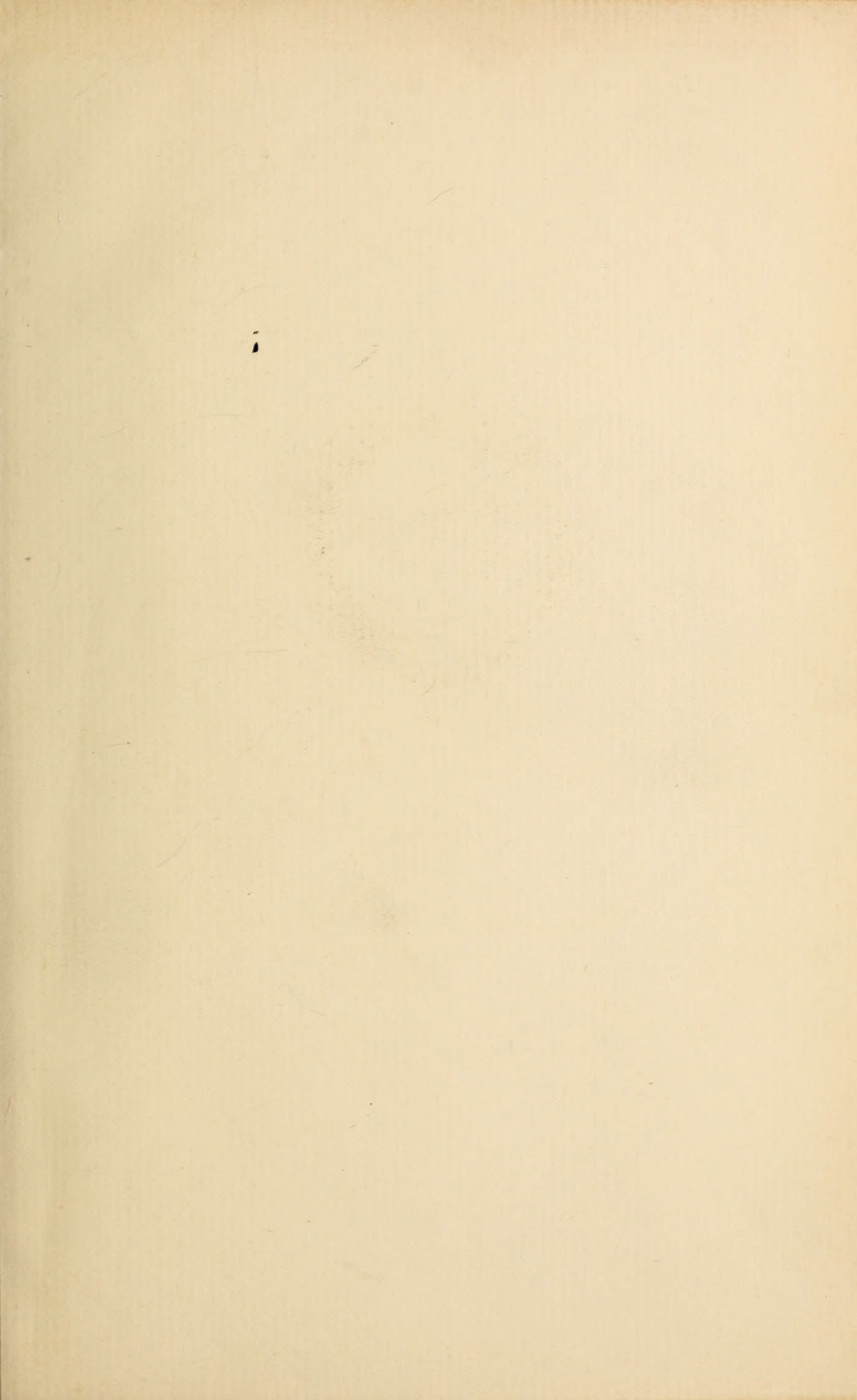


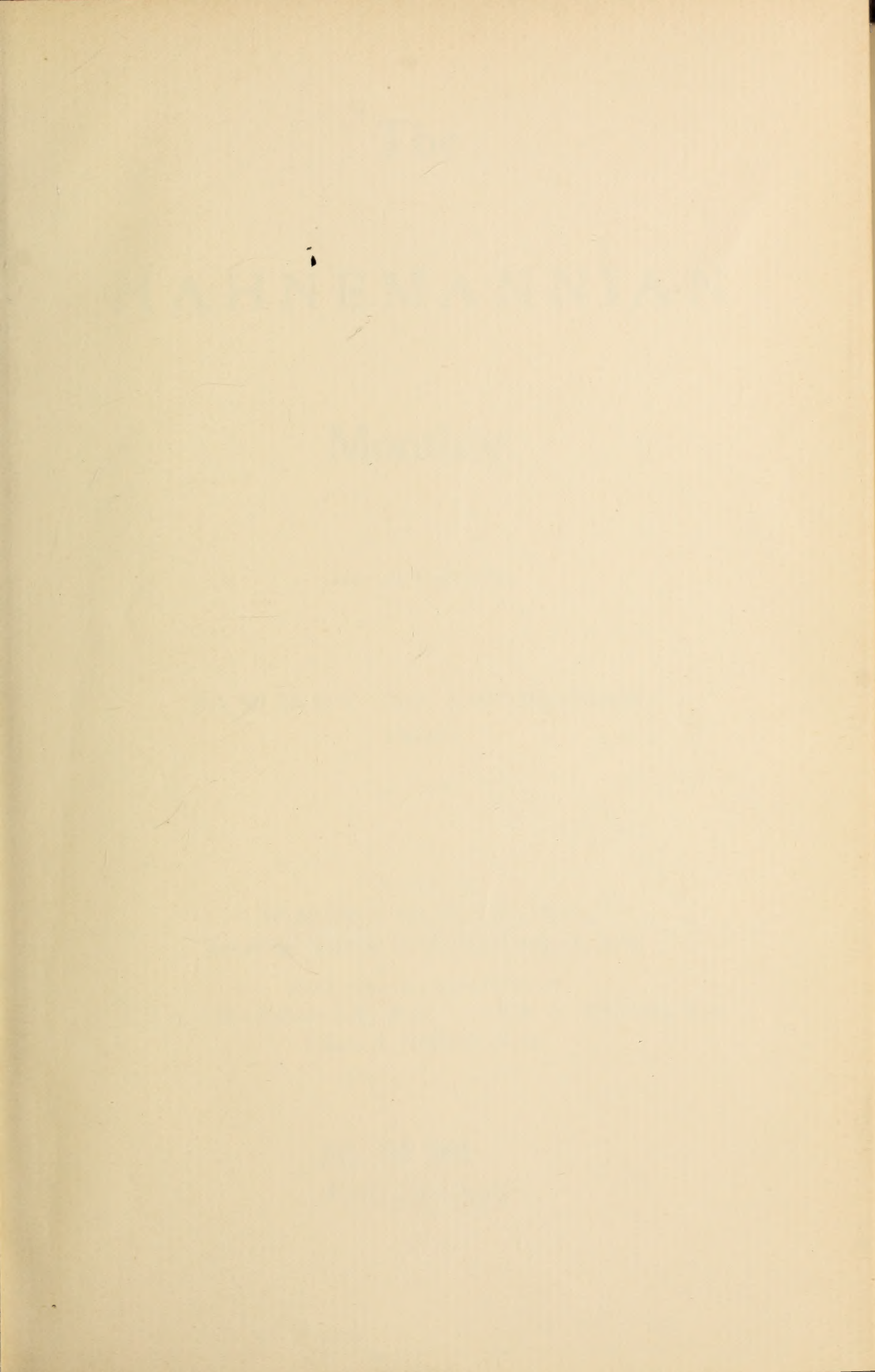
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The HAHNEMANNIAN Monthly.

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JANUARY TO DECEMBER,
1905.

EDITED BY

CLARENCE BARTLETT, M.D.

ASSISTANT EDITOR: G. HARLAN WELLS, M. D.

WITH THE COLLABORATION OF

WM. B. VAN LENNEP, A.M., M. D., WM. C. GOODNO, M. D.

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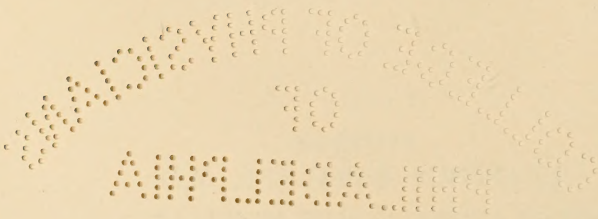
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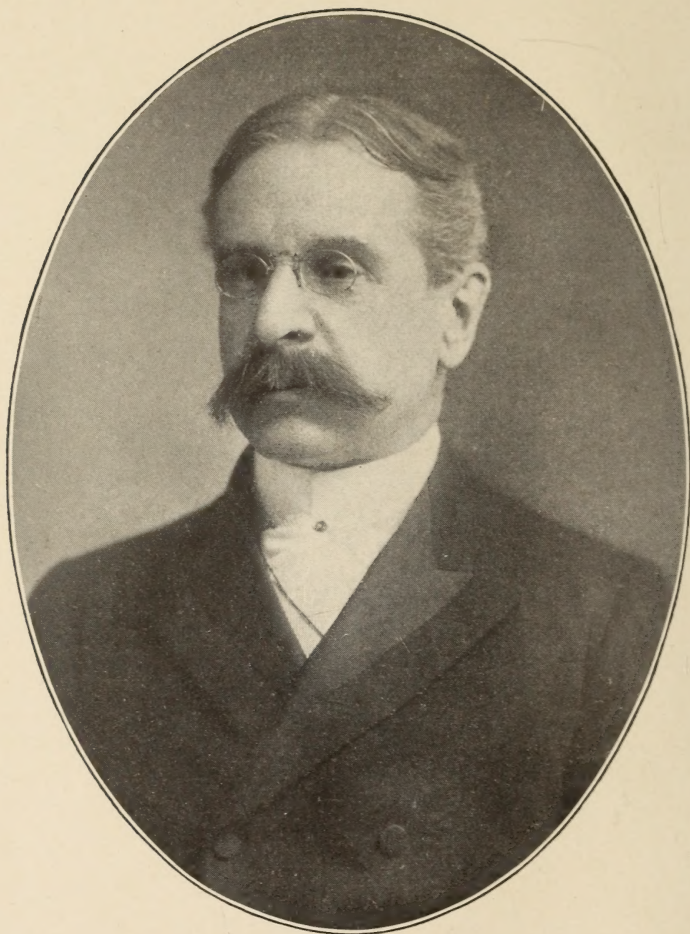
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By CLARENCE BARTLETT, M. D.





WILLIAM H. BIGLER, M. D.

Born June 10, 1840

Died December 10, 1904

THE HAHNEMANNIAN MONTHLY.

JANUARY, 1905.

ANNUAL ORATION.

(Delivered before the Massachusetts Homœopathic Medical Society, October 12, 1904,
by Elmer H. Copeland, M. D.)

MR. PRESIDENT, LADIES AND GENTLEMEN:—

Before entering upon the more serious matter of this discourse, I wish to acknowledge my appreciation of the honor conferred upon me by your President and the Executive Committee in asking me to deliver the annual oration before this ancient and honorable organization; ancient in that, if I am rightly informed, it is the oldest medical society in existence in America, its organization in 1840 antedating by four years the organization of the American Institute of Homœopathy, its nearest rival for antiquarian honors; honorable because it has ever stood a representative of the best and foremost thought in the medical profession. But why have you sent into the western part of our State, even unto the banks of the "winding, willow-fringed Connecticut," for one to entertain you? My native modesty forbids me to say "instruct you."

SOME PROBLEMS OF THE PHYSICIANS.

Let me call your attention this afternoon to "some problems of the physicians," not to all the problems,—that would require too much time,—but to just a few of them. These problems are the ones we are all familiar with; about them all we have thought more or less, and about some of them we have done more or less, still these are the problems that are not gener-

ally discussed at our regular medical meetings, and, if mentioned at all, it is more incidentally than from definite purpose.

For this reason, and because they are of such transcendent importance, I ask your attention for the space of half an hour.

As the hope of each succeeding generation rests in the children, I will first ask you to consider some problems in reference to caring for the health of the child.

First and foremost, every child is entitled to a happy childhood. It is the perquisite of children to be happy and to give happiness. While this is not possible in every case, we will consider only those cases where it would seem possible it only the child had health sufficient for taking hold of the natural sources of happiness, good food, pure water and plenty of outdoors. To rear a child to this condition often requires the utmost watchfulness, prudence and knowledge on the part of parents and physicians. It requires a knowledge that is real and active, not merely a knowledge sufficient to assent to a proposition, whether it is right or wrong. Too often our efforts are called too late for any real benefit to the individual child, making our work one of diagnosis, palliation and prognosis, when it might have been prophylactic, curative and educational.

Let me illustrate my meaning. A child fourteen to eighteen years old comes to us for treatment of scoliosis. Much can be done to straighten the child's back, provided the condition has not continued too long and the malformation become permanent. When the child began school the eyes should have been examined, thereby discovering and correcting the astigmatism which caused the child to hold his head on one side, this deformity resulting in scoliosis. The cause of the trouble had been of long standing, ever since the child began using his eyes, going on unrecognized, producing its crippling effects until the object before us was one of pity, perhaps incurable. Another example, and one even more common, is the deaf child. Clarke School for the Deaf, Northampton, is, to us, a daily reminder of the numberless children not having their adenoids removed soon enough. A large majority of cases of early deafness have resulted from this cause. The same cause unremoved produces the thin, anæmic, narrow-chested child, given over to bronchitis and later to consumption. Defects of health resulting from eye-strain are too familiar, to this audience, to mention except as an illustration of the importance of

early, careful examinations, that no physical defects may mar the perfect, symmetrical development.

The above explanations of diseased and deformed conditions are refined and scientific compared to the old explanations of scoliosis as due to the child habitually sitting with the same leg crossed over the other leg; or that deafness in childhood was hereditary; or that headache and vomiting were caused by biliousness. Now our scholars and scientists must explain still further and tell why the child is astigmatic, why he has adenoids, why he has eye-strain, why, in short, he is not born a perfect little animal? We are here dealing with the results of processes going on for generations; while correcting these results we should be dealing with the causes that produced the results. They are indications of a degeneration in the human race, increasing with fearful rapidity. Perhaps the problems next considered may give a partial explanation of this degeneration. It is not a hopeful sign that we find more of these degenerative processes at work among the educated and well-to-do classes.

The next problem to which I invite your attention is that of education. To make the unqualified statement that education is pursued at too rapid a pace is to invite severe criticism. Education has been placed upon so lofty a pedestal, we have been taught to bow down and worship at its feet so long, that to question the methods adopted to attain the so-called liberal education seems to many almost sacrilegious. Every child must begin the race for an education, toe the scratch at five, be off at the word and then the struggling wavering line advances. The pace set for the most active child must be kept by every one, no matter what weights he may carry of natural defects or acquired deformities of mind and body. The results, shattered nerves, undeveloped bodies, distorted intellects, finally reach the goal, a breathless, helpless generation, unprepared to meet the duties of life, and especially unprepared for reproduction. It is high time the great and influential body of physicians, to which we belong, stepped to the front and commanded a halt! This education does not educate. It is not a leading out, a development of the faculties. It is a cramping, warping process, whose results are disastrous to the individual and equally disastrous to the race.

The prime object of every living thing is to grow, to develop to the best possible point, produce seed and reproduce its

kind, "every living thing after its kind." I care not how much you may exalt art, science, literature, society, religion; each and every one should be the means to the end that a better race may be produced.

A native Japanese missionary in this country, speaking of the difference of development between American girls and Japanese girls, said in broken English: "The difference between your treatment of your daughters and our treatment of our daughters is that you 'develop' your daughters into wives and we 'develop' our daughters into mothers." In that sentence he expressed a great truth. Our girls are taught that their supreme object is to be brilliant society women, while their girls are taught that it is their greatest honor to become good mothers.

Another problem of the physician is the problem of marriage. To adequately discuss this subject we ought to consider the social, moral and educational problems of our time and country, but the limited space at my disposal allows only a cursory glance at a picture deserving most minute study. The marriage relation, the one man living with one wife in the home for the fostering and rearing of their offspring, is the crowning glory of civilization. That it is not always so considered it is sufficient to state that there were sixty thousand divorces in the United States during the last year. It is our solemn and bounden duty as guardians of the public health to encourage the marriage customs, beneficial alike to the physical and moral health of the community. The medical profession has too quickly forgotten that its offices were once held in conjunction with the priesthood. (John Fiske, *Discovery of America*. Vol. i., p. 119.)

The causes assigned why young men and women do not marry should be entirely inoperative. The chief reason advanced is that a young man cannot afford to marry and support a wife and family. He must spend so much for clubs and clothes that practically nothing is left for bed and board, and should he marry, the result would be disastrous to himself; he would be obliged to curtail his bachelor comforts and luxuries. It would not be possible for him to appear as a man of unlimited income on fifteen hundred dollars a year, or less. In other words, he must appear, more nearly, at least, exactly what every one knows him to be, a fifteen hundred dollar man. The young women cannot marry, forsooth, because the young

men cannot support them in the style and luxury of the upper four hundred. These, and a hundred other reasons equally trivial, are advanced as the cause of celibacy and single blessedness.

When a man and a woman marry, for we admit this occasionally happens, another problem is presented to the physician. That man and woman do not want children, at least "not yet awhile." Well, what am I going to do about it? What is any honest physician going to do about it? We know very well there are plenty of dishonest physicians who know at once what to do about it, without any preliminary lecturing upon the ethics of marriage. The man and wife go to Europe, or New York, or, possibly, to Boston, the wife is placed in a sanitarium for nervous prostration, it becomes necessary to perform curettage, a month or two spent in recuperation, and the happy mother (?) returns to her family, to her social duties, and to her activities in the church.

Occasionally one of these women, becoming pregnant, determines to carry it through to the bitter end. You certainly would think, to hear her talk, she had contracted some contagious disease, and one is inclined to believe, judging from the uniformity of experience, that one attack must insure immunity. Is there anything more deplorable, except childlessness, than the only child, brought up without the stimulating, educating association with brothers and sisters?

Another problem of the physician is the question of dress; reference here is made entirely to the dress of women. It is something of a mystery, yet fashion has seemed to decree regarding the garments of men a peculiarly sensible and healthful manner of dress, and in regard to the dress of women, fashion seems to have done about all she could. It does not matter to fashion what shape God intended woman to have; man we are told He made in the likeness of His own image, but if fashion decrees that a woman should have a straight front, a straight front she must and will have! If fashion says a woman must have long hips, long hips she will have; if short waist is "it," then it is a short waist; if low busts are the style, then low busts are ordered. All this wonderful deformity is brought about by the different "L. R." models and others. As proof of this statement, look at the advertising pages of any fashion magazine. This advice is for "doctors only."

What can be said in favor of the high heeled shoe? Only a few years ago we were told the French heel had gone forever.

It would seem so! There are no two causes producing more misery for women than high heeled shoes and corsets. Oh! of course women do not lace nowadays; we have all heard them say so!

“Woman, woman, lovely woman!”

Now let me say just a word about one of the most serious problems of the physicians, one about which, in all probability, we can do least. My reference is to our attitude regarding syphilis and gonorrhea. These diseases are old and are well known, the serious consequences resulting from them are well known. That they are increasing at an alarming rate is also well known. These contagious diseases, from the very manner of their infection, are kept as secret as possible. We are required by law to report to the Board of Health certain contagious diseases. It has been suggested that we ought to report also these contagious diseases. Such a suggestion is worthy of our serious consideration.

In the foregoing have been stated some of the problems of the physician in general. In closing let me state one of the problems peculiar to the Homœopathic physician. Hufland, writing about homœopathy in the time of Hahnemann, said: “The peculiar and important problem for homœopathy is to search for and find new specific medicines.” (*Life of Hahnemann*, p. 26.)

As homœopathic physicians, we do not recognize any specific in medicine. That medicine is a specific which cures. One medicine may cure at one time and another medicine may cure at another time conditions apparently similar. Yet Hufland stated a great truth, even if we cannot entirely agree with his wording of the principle. It is the province of homœopathy to search for and find remedies which will counteract the tendency to disease. Here is a great opportunity almost unoccupied. Children are coming into the world with warped and vitiated vital strength. As they grow in years they become more and more subject to disease. Before going further along this line, lest some may misunderstand me, let me state to my mind the germ theory of disease is fully and irrevocably established. But the germs alone cannot produce the disease. We must have the soil fit for the seed to grow, else the seed falls upon barren ground and cannot take root. We can never rid the world of germs of disease, and our only hope is to make ourselves as invulnerable as possible. The germs of disease

attacking the human body is an evidence of degeneration. The healthy human being should be able to live in the midst of germs and show no sign of weakness. We are constantly treating the results of degeneration and paying comparatively little attention to the causes. The evidences of decay are about us everywhere; children who are obliged to wear glasses almost from birth; children whose first set of teeth hardly last long enough to hold the shape of the jaws for the permanent set; children with rachitic chests and tuberculous abdomens. Why are these things so? It is not because the children do not have care and sufficient food, because these conditions are more common among the well-to-do and are increasing here more rapidly. This is the special problem of the homœopathic physician, to find and remedy the causes of this degeneracy. Our constitutional remedies will do much toward helping them, but proper living and proper diet will do more. Growing up into sound physical bodies, they will resist better the germs of disease. You and I are breathing germs every day that would attack and kill us if there were not a resistance inherent in a healthy body. Make this resistance as great as possible by every means of good living, out-door exercise and preventive medication.

In some respects the problem of preventing disease is much the same as the problem of preventing sin. We can restrain the sinner, but it is often impossible to reform one. We can check the ravages of constitutional disease sometimes, but how often can we eradicate it entirely from the system? The time to begin is before the sinner has sinned and before the degenerate has become diseased. We are sometimes told that health is contagious as well as disease. This is not true. Health will not come to one unsought. Like every other good thing, it must be striven for, both for attainment and for retention.

This is the age of wireless telegraphy. A message is borne to us upon the pulsating waves of ether from out of the blue sky, from far down below our horizon line. Wherever we set up instruments of interpretation we may gather messages from out the wide expanse of air. These patients of ours are messages from out the distant unseen past. Often we are unable to read them aright, and, to us, entirely meaningless many of them must remain, because of our imperfect interpretations. We transmit the message, unread, to future generations. The

greatest problem of the physician should be to set up such instruments of interpretation as will gather the secrets of the past. Scientific men are studying the subject with scientific means, and the results are most gratifying. Let us, as physicians, not satisfy ourselves with treating merely the end products of disease, but rather let us search for those distant sources of degeneration starting far down below our horizon line, correcting all mistakes we can, and send the message on to future generations yet unborn.

REMARKS ON THE TREATMENT OF PNEUMONIC FEVER.

BY CLARENCE BARTLETT, M. D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of Philadelphia County, September 8, 1904.)

IN the undertaking of any venture, it is of paramount importance to determine two things. The first of these is the measure of result to follow one's efforts, and the second is a determination of the indication for the methods to be employed in securing results. So when studying the treatment of pneumonic fever, we must have a correct understanding as to the mortality of the disease under the most favorable circumstances; and of the causes leading to a fatal issue.

Considering the first of these, it is not sufficient that we rest satisfied with average results. We cannot regard ourselves as successful unless we secure a percentage of recoveries equal to the best. Even then, it should be our endeavor to do still better, and establish a record. It is right here that we are too liable to make a serious mistake in our clinical studies of pneumonic fever. It is a very proper thing at the present time to believe that pneumonic fever is attended by an average mortality of twenty-five per cent. Let the treatment be what it may, expectant, homœopathic, or allopathic, nevertheless, the results when a large series of cases is considered will be approximately the same. The natural result of such a heresy is therapeutic nihilism. True it is that numerous eminent statisticians have tabulated many thousands of cases of this disease, and have apparently established the above conclusion. But one must remember that their statistics are based for the most part upon hos-

pital experience. The patients whose cases are thus studied, are in the majority of instances, the subjects of privation and alcoholic indulgence, and have sought admission to the hospital only after the disease has continued for several days. I have said that no results but the best should satisfy us. What is that best? Years ago, our own Fleishmann, of Vienna, in a large series of cases had a mortality of but five per cent., a result that still stands among the best. Among those who have been favored with creditable results are Auffrecht, 60 cases, mortality, 6.6 per cent.; Risell, 127 cases, mortality, 1.8 per cent.; Petrescu, 825 cases, mortality, 2.06 per cent.; Todd, Balfour and Hughes-Bennett, 3.84 per cent.; R. P. Howard, 170 cases, mortality 6.1 per cent. Probably Fleishmann's figures are the most favorable, because his cases were all treated in the Vienna Homœopathic Hospital; while those of the others were derived from private and hospital practice. Certainly, we cannot regard a mortality of 18.1 per cent. in 223,730 cases, studied by Wells, as an ideal.

Next as to the causes leading up to a fatal issue. Strange to say that although pneumonic fever is attended by characteristic and well defined anatomical lesions, nevertheless, such lesions are in rare instances only the cause of death. In the vast majority of cases, the unfavorable result is due to the profound toxæmia or to a failing heart. This would suggest that it is better to pay attention to the patient and his constitutional condition for the most part, making the pulmonary changes a matter of secondary consideration. This was the doctrine of the early homœopaths, guided by the dictum: "Treat the patient, and not his disease." With our present knowledge of the pathology of pneumonic fever we may express it: "Pneumonic fever is a profound constitutional disease having a local manifestation; and it is to the management of the constitutional condition we must look, if our results are to be ideal."

Conceptions as to what constitutes ideal results vary with the individual. Those whom we style idealists expect to attain perfection. This in the presence of the many frailties of weak humanity is impossible. Idealism not recognizing the limitations of human capabilities, seeks to discover specifics the use of which shall invariably be followed by but one result, namely recovery. So for years there has been a search for a specific for pneumonic fever. Notwithstanding the tremendous energy expended in the undertaking, we are still without it. Let one

do as I have done and spend a little time consulting a number of writers, and he will learn and that too within recent years, the following have been recommended as all but infallible in the treatment of croupous pneumonia: Bloodletting, oxygen, ice poultices to the chest, digitalis, creosote, carbolic acid, carbonate of creosote, quinine in small doses, quinine in large doses, iodine, iodide of potassium, strychnia, and alcohol. Strange to say the advocates of each of these specifics have found all of them with the exception of their favorites utterly useless if not absolutely pernicious. Truly one lays aside his books in full sympathy with the old parish clerk who remarked: "For thirty years I have heard the reverend gentleman of the afternoon contradict the reverend gentleman of the morning, and I thank the Lord I am still a Christian."

So much by way of preliminaries.

The treatment of patients with pneumonic fever includes attention to hygienic details and the administration of curative and palliative remedies.

No one will dispute the statement that the earlier in the course of his disease the pneumonic patient comes under treatment, the better will be the result. And yet when one reads textbook after textbook, he becomes painfully aware of the systematic neglect of this important point in statistical studies. With the study of typhoid fever, it is different; and so I may also say of diphtheria. We know the mortality of these affections in percentages according to the period of the disease at which the patient came under treatment. We know that bad results are very exceptional when the patients place themselves under skilled care on the first day; and there are some prepared to say that fatal results should not occur if proper treatment is coincident with the onset of the disease. How far prompt treatment will lessen the mortality of pneumonic fever, we cannot say. Inasmuch as it is an acute infectious disease like typhoid fever, and as in the latter disease, the fatal issue is often dependent upon the toxæmia and the cardiac changes, one would reason that early treatment is capable of doing much.

Physical and mental rest is fully as important in pneumonic patients as in any other disease; and yet how frequently do we unconsciously ignore this proposition. True we tell our patient to go to bed and stay there; but how frequently do we disturb him by unnecessary physical examinations and ill-advised attempts at local treatment. I believe that one thorough physical

examination of the chest will, in the majority of cases be sufficient for all practical purposes. After that the physician need only perform such percussion and auscultation as will not disturb. *But he should never neglect the heart.* Remember that more can be learned of the progress of the *patient* by studying his constitutional condition, than by close inquiry into the pulmonary changes. The patient must be taught to avoid unnecessary exertion when attending to the bowels and the bladder. To this end, he must be taught to use the bed pan.

It is well known that pneumococcic infection is favored by exposure to cold. It is necessary therefore that the patient be well protected from unnecessary chilling. To this end, the bed must be made warm. When changes of sheets are made, due regard must be had as to this point. In some cases, it may be advisable to use hot bottles, although as a rule this is unnecessary. The clothing must be light. The room should be maintained at a temperature of 70° F., and well ventilated. The latter desideratum must be accomplished, however, without exposing the patient to draughts.

Bathing is necessary for purposes of cleanliness only. In very exceptional instances only should it be employed to reduce temperature as in typhoid fever. The pernicious effects of high temperature are in direct proportion to the duration of the fever and not to its intensity. Hence in typhoid fever, we find emaciation and prostration common; while in pneumonia, which almost never continues longer than ten days, the patient is in good physical condition within a few days after passing through the crisis. So unless hyperpyrexia is present, the fever of pneumonia may be left to itself. This injunction is made all the more important by the possibility of harm arising from chilling of the bodily surface by undue enthusiasm in cold bathing.

The exhausting character of typhoid fever demands that we feed the patient for strength. The relatively short course of pneumonic fever relieves us of this responsibility in the treatment of patients suffering from that disease. Nutrition is, of course, important, but as compared with typhoid fever, the patient will thrive on comparatively little food. The digestive apparatus is as a rule in such condition that but a small proportion of the nourishment taken can be digested and assimilated. That which we give must be liquid, and of a nourishing and easily assimilable character. The best foods are milk and broths, which should be administered at intervals of about three

hours, until the fever falls. Then we may resort to solids of easily digestible character. Water should be administered freely as desired by the patient. Fruit juices are permissible. If the patient craves tea or coffee these beverages may be permitted, unless contraindicated by undue mental excitement or sleeplessness.

The bowels should receive due consideration. If they incline to an unreasonable degree of sluggishness, the use of enemata of water or glycerin will prove all sufficient. The necessity of attending to the constipation is made evident by the impairment of digestion and flatulence associated with that symptom.

In the majority of cases, the question of local applications is not an important one, so far as any real benefit to be derived from their employment is concerned. The patient and his friends expect local measures, and the mental satisfaction to be derived from their use must be respected. In ordinary cases, the best local measure is the application of a light flannel jacket of one or two layers. Ice-bags or the ice-jacket should be condemned, notwithstanding the endorsement given them by some authorities as a means of relieving pain. The hot water bag or the hot poultice is much better, and is attended by less danger. When the pulmonary consolidation extends from day to day, or when there is pulmonary oedema, the use of antiphlogistin,—a most excellent preparation of glycerin and clay with a most horrible name,—is to be recommended. I have thought too that this preparation is of value in cases presenting delayed resolution.

The administration of alcoholic stimulants in pneumonic fever is a most important one. The majority of cases do well without them. When at the time of the crisis, there is some increased prostration or collapse present, their employment is absolutely essential. In the case of patients who have been accustomed to use them regularly or in excess, it is impossible to secure the best results without them. With cardiac weakness impending, alcohol is in the majority of cases the best stimulant. In most instances, one will find that the best results are to be attained from whisky or brandy. The dose should be moderately large, so that the patient takes eight to twelve ounces in the course of the 24 hours. If we wish to secure their physiological action, we must give enough.

The remedies best adapted to the early stage of pneumonic

fever are those advocated by Goodno, namely Ferrum phos., Aconite, Bryonia, and Veratrum viride. Of these, it seems to me that Ferrum phos. is the one which will be found most frequently of use. In those cases in which the fever is ushered in with a well-defined chill, and the history of exposure to cold is clear, *Aconite* is the remedy, especially when associated with the characteristic mental and nervous state of that remedy. At this stage, it is rare for the objective symptoms to be such as to show the patient is suffering from pneumonia. *Ferrum phos.* is called for in cases in which the chill is poorly defined; the patient is usually one whose constitutional condition is more or less undermined by anæmia. The indicating symptoms include, blood-streaked expectoration, dyspnœa, dry cough, and fever. If, as is usually the case, this remedy succeeds in modifying the symptoms, it is wise to continue it throughout the course of the illness, or until symptoms appear clearly calling for another remedy. Of the influence of ferrum phos. on the course of croupous pneumonia there can be no question. Several times I have seen it bring the illness to its crisis in less than five days.

Veratrum viride finds a place in the armamentarium of both schools of medicine. The cases in which it is indicated are relatively few in number. This doubtless accounts for the diversity of views concerning it held by old school physicians, some of whom accord it unqualified praise, while others condemn it without stint. It is indicated in the first stage of the disease, with tumultuously acting heart, rapid pulse, and dyspnœa as the prominent symptoms. The drug is a powerful cardiac depressant, hence should never be given in massive doses. At the most, the dose should be one to two drops of the tincture given every hour, or if the temperature be unusually high, every half hour may be the interval.

Bryonia is indicated mainly by the local symptoms, being indicated in those cases in which pain is a prominent feature. In other words, it is the remedy when the pneumonia is associated with pleural inflammation. Associated symptoms include dryness of the mouth, dry cough, dyspnœa, and thirst. The case is exceptional in which this medicine along with the application of dry heat and rest does not bring more or less complete relief to the thoracic pain. Like ferrum phos., bryonia may be continued with advantage throughout the course of the illness.

When the pneumonia is ushered in with vomiting, and this frequently happens, *apomorphia* 2x is invaluable. It should be given in the form of tablets, every two hours. Solutions of the drug decompose within a few hours. The association of the disease with bronchitis makes its selection more timely. As in the case of ferrum phos., I have been fortunate enough to abort several cases of pneumonic fever with it, the crisis in one case being reached upon the third day. As a rule, it is found to exert a sedative influence upon the nervous system, and modifies the chest pain.

Phosphorus is perhaps the most widely used of our pneumonia remedies. Its reputation is based very largely upon the experience and results of Fleishmann, in Vienna. Its local symptoms are not such as to suggest its use in pneumonia unless associated with bronchitic phenomena. Fleishmann, Farrington, and Ringer, all unite in making the presence of typhoid symptoms the important indicating symptom indications for the drug. It is not as well adapted as bryonia to the pneumonias associated with pleural inflammation.

The meningitis of pneumonia,—pneumococcic meningitis,—finds its most efficient remedy,—if any remedy can be regarded as efficient in a complication of such mortality,—in *iodide of potassium*. The symptoms are such as we usually expect in cases calling for belladonna, active delirium, flushed face, dilated pupils, etc. In delayed resolution, iodide of potassium may be a useful medicine, when other drugs have failed. In one recent case, in which extensive consolidation remained despite the entire absence of all subjective discomfort, recovery was finally brought about by potassium iodide in substantial doses. Other remedies suitable for delayed resolution are *sulphur* and *iodide of arsenic*.

Other iodides have been used by Goodno with satisfactory results. In fact, so far as I know, his work constitutes the entire literature on the subject. *Iodide of antimony* was proposed by him as the remedy for pneumonia associated with a marked bronchitis in phthisical subject, and characterized by muco-purulent expectoration, or sputum of a rusty fibrinous character. *Stannum iod.*, likewise proposed by Goodno, is suggested as a remedy for the stage of purulent infiltration. The symptoms include large, moist rales in the bronchial tubes, difficult expectoration of "heavy yellowish brownish matter with some odor."

In the presence of a profound toxæmia,—typhoid symptoms being present,—we should have recourse to the reliable medicines ordinarily indicated in typhoid fever. Including rhus, hyoscyamus, baptisia, antimonium tart., ammonium carb. and phosphorus.

With cardiac failure threatening, it is wise to resort at once to alcohol in one of its forms, but especially to whisky or brandy. If this does not secure the desired result at once, *strychnia* should be prescribed. It is unquestionably the most satisfactory stimulant of the heart in pneumonic fever. It is best given hypodermically, in doses of one-sixtieth of a grain every four hours, until danger has passed.

There is one variety of circulatory failure which may be referred to as special to pneumonia,—I refer to a distended right heart brought about by the engorgement of the pulmonary circulation. The heart itself seems to be strong enough to do the work of ordinary health, but is incompetent to cope with the increased strain thrown upon it. Physical examination shows the extension of cardiac dullness to the right. The patient is cyanosed; breathing is short and labored. The pulse at the wrist is almost imperceptible, yet auscultation shows a heart acting with disproportionate force. The only remedy in such cases is a moderate bleeding, *i. e.*, of eight ounces. The result is usually astonishing. In the only case in which I was obliged to have recourse to it by the indications present, a patient who had been at death's door was within an hour brought into a marvellously good condition. Do not understand me as advocating bleeding as a remedy for pneumonia; but rather advising in cases in which a fairly good heart is laboring under an unusual turgescence of the venous system, that the circulation be relieved of some of its load. An exactly parallel case would be that of a horse with an overloaded cart at the foot of a hill, which he cannot climb by reason of the weight imposed upon him. Do not stimulate the horse by the whip; simply take off some of the load.

Of other cardiac stimulants the only one worthy of mention is caffein, which may be used when *strychnia* does not satisfy the requirements. I am aware that others have been recommended, as *digitalis* and *nitroglycerin*. *Digitalis* has been praised and condemned by equally prominent authorities respectively. As for *nitroglycerin*, it is not to be regarded as a heart stimulant in any sense of the term. Its use has been ad-

vocated as an arterial dilator, the theory being that by securing such dilation the venous system will be relieved. Such a use of the drug does not strike me as even approaching the rational. As for its use in ordinary cases of failing heart, again it seems to me that is indicated in rare instances only. In pneumonia as in most of the infectious fevers, the vascular tension is already low. To give glonoin under such circumstance to secure its physiological effects, does not seem reasonable.

NOTE ON AMBROSIA ARTIMISIÆFOLIA.

BY FREDERIC R. WILCOX, M. D.

(Read before A. R. Thomas Club.)

I HAVE selected the above subject for the consideration of the club to-night, hoping by so doing an interest may be awakened in a remedy as yet little known, consequently very much neglected, and yet one possessing medicinal virtue not to be surpassed in its special sphere of action by any drug in our *Materia Medica*.

Ambrosia is known commonly as Ragweed, Bitterweed, Hogweed and Roman Wormwood. Of this remedy the Homœopaths as yet have a very incomplete proving, if any at all, consequently what little literature on the subject I have been able to obtain has been found in the *National Dispensatory*.

There I find the following description: "This genus comprises a coarse looking, rough or hairy weed with mostly opposite leaves and with inconspicuous yellowish staminate flower heads arranged in elongated spikes at the base of which, one to three staminate flowers are situated in the axils of the leaves. This species has a slight and rather fetid odor and a bitter and slightly astringent taste."

Under medical uses I find: "Ambrosia like all other bitter herbs has been employed in the cure of intermittent fever. Its astringency has caused it to be used to moderate discharges of the blood and mucus and to palliate mercurial salivation. The stimulant qualities attributed to it are supposed to be shown in the typhoid state of febrile affections."

My attention was first drawn to the medicinal value of this herb while on a trip in the northern part of the State a year or so ago. In that particular section it is employed for a variety of affections, particularly gastro-intestinal disorders.

Nor is it used alone for the ailments of man, but for beast as well. In the early fall this herb is gathered abundantly by the country folk and carefully preserved for use by the dairymen, in the winter when calves begin to make their appearance. Young calves, soon after the weaning period, are particularly prone to diarrhœa or "scouring" which, if not very soon checked, will greatly retard the growth of the animal, if not result fatally.

I am informed that in this special condition the action of *Ambrosia* is little short of magical.

After seeing the splendid action of this drug, in the cases narrated, it occurred to me that a medicine endowed with such remarkable healing power should be more generally known. On my return to the city, I immediately procured some of the tincture and, whenever a suitable case presented itself, prescribed it. It was not until the present summer, however, that I had an opportunity to give this remedy a satisfactory test. As you are aware, bowel disorders this season have been unusually numerous and extremely severe. I have heard much complaint from brother practitioners of their inability to relieve their patients with the celerity desired. During the entire epidemic my sole dependence has been placed upon *Ambrosia*, and it has certainly acted most satisfactorily. I have given it in all forms of diarrhœa from the simple variety to the most severe dysentery, and invariably with the same good result. I have also prescribed it for the colliquitive diarrhœa of phthisis; and, while its use in this particular form has been limited, I am satisfied it exerts a very beneficial influence in holding in abeyance this exhausting condition. So uniformly good has my experience been, from the employment of *Ambrosia*, that I am inclined to regard it, in the disorders mentioned, as truly specific. Unquestionably the principal action of this drug is upon the mucus membranes; a fact well borne out in my own experience and in that of our old school brethren. It has been prescribed in our own school mostly for hay fever, for which affection it seems to act very well.

Anshutz, in his *Old and New Forgotten Remedies*, mentions four cases of hay fever promptly cured by *Ambrosia* 3x dilu-

tion. I have prescribed it in simple rhinitis and been well pleased with the results obtained. It is now generally regarded as one of the important factors in the production of hay fever; and if such be the case, the effect thus induced must be purely mechanical and not physiological. It is a known fact that persons working in hay or grain in which this weed abounds suffer greatly for the time being from acute rhinitis, but the same is true of most herbs which exhale their pollen in considerable quantity. Ambrosia acts nicely in chronic bronchitis and even in the distressing cough of phthisis. I have prescribed it in both affections.

The dose I have generally employed has been five and ten drops of the tincture repeated every two or three hours. That this much despised and underestimated drug is worthy of more attention than it has received at the hands of the physician I am convinced, and I sincerely trust, that should you try it, you will be as agreeably surprised as myself.

CHORIO-EPITHELIOMA—REPORT OF A CASE: RESUME OF THE HISTOLOGY AND PATHOLOGY.

BY JOHN EDWIN JAMES, JR., M. D.,

(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

FOLLOWING the custom of many of my predecessors in this chair, I had intended giving as my paper, gleanings from the literature published during the past year, pertaining to Obstetrical matter—thinking that probably more benefit might thus be derived in so rehashing what you have already read (and possibly forgotten for the while), than in attempting to present in a poor way some one and probably over-worked subject. Nowadays, with women rapidly becoming victims to modern ways of living, victims of the progressive and strenuous life, every physician must be more than ever familiar with all known complications of pregnancy, both old and of recent acquisition to the profession, and he or she must be suspicious of any one or several in every case of confinement he or she is called upon to attend. So vast must be the resources of the modern accoucheur that many are advocating

strict Specialism in this branch, and deem the time not far hence when public sentiment, if not professional justice, will demand that the Obstetrician attend women in labor, rather than the hurried, general practitioner. Whether the family doctor shall send his cases of pregnancy to an outsider or attend them himself is a mooted question, and the outcome still remains in the hands of time. As it is now, it is the general practitioner who sees the majority of labor cases and so it is he that must be as well versed in the many new obstetrical theories and practices as the specialist.

With the opportunity of reporting to you a rather rare and extremely fatal complication—such a collection of new theories and recently published practices would be amiss; for the time is at hand when every physician must know of and be able to diagnose early the Chorio-epithelioma malignum in order that its high mortality rate may be reduced by the institution of early, effectual, radical treatment. We must be as much interested in the Histology and Pathology of this new growth as the Pathologist himself; and it is my intention, following the report of a case prepared by Dr. Jno. E. James, to give a brief résumé of these phases of the growth, derived from the views of the more recent investigators of the subject, trusting that the mere enumeration of the various facts and theories may bring forth in the discussion something we can hold on to as definite for a while at least.

The report, as prepared by Dr. Jno. E. James, is as follows:

"I was called June 18th, 1904, to a neighboring State to see a woman with "Uterine haemorrhage."

History:—Mrs. W——, age 20, married, Primipara, five months before gave birth to a fine, healthy child; had a tedious but otherwise normal labor, a good "getting up." Nursed the child and regained strength without incident except the flow continued intermittently but not excessively for about eight weeks. About four weeks after it ceased, had what she termed, her menstruation, slightly more than was normal and lasting over a week. At about the next period, had a return of bleeding with excessive flow; her physician then desired to examine her but was put off by various excuses for several days, until a chill, offensive discharge and a severe haemorrhage brought consent. He found the uterus large, soft and os patulous; after etherizing he curetted, removing a large amount of what he believed was partly organized

blood clots; the bleeding and discharge stopped, temperature, pulse, etc., became normal and convalescence was rapid. In three weeks there was a recurrence of the haemorrhage and I was sent for as above.

I found her nervous, weak, anaemic; head, lungs, and heart negative; abdominal viscera negative, except a large, smooth uterus extending three inches above pubis. She was etherized at once. Examination revealed the following: Vagina normal, cervix large, soft and patulous, body of uterus large, $5\frac{1}{2}$ inches inside measurement. Upon curetting I removed a large amount of decidual tissue and blood clots, the uterus contracted somewhat and bleeding stopped.

I diagnosed deciduoma and probably malignant, but took some tissue for microscopical examination and sent it to the Hahnemann College Pathological Department. In due time I had a report that it was a typical case of Chorio-epithelioma. I advised an immediate Pan-hysterectomy, but delays occurred and on the tenth day after last curettage she began with what was deemed an attack of pneumonia; she was not brought to the Hospital until July 6th, one week after first evidence of lung involvement. Upon admission she was weak, anaemic, cachexia well marked, emaciation not so well marked, temperature $103.1-5^{\circ}$, pulse 160, respiration 40. Cough hard, thick mucous expectoration, with sharp pains at different places over both sides of chest, great dyspnoea, dullness over larger parts of both lungs and pleuritic effusion in both cavities—but greatest upon the right side. I believed it to be metastasis to the lungs and did not consider an operation of any use, so declined to thus interfere. Although the temperatures ranged from 101° to 104° , pulse 120 to 140, the respiration continued 46 to 52—yet her cough and general condition improved and the pleuritic effusion disappeared, so that an expert diagnostician seemed in doubt of the certainty of lung metastasis. The discharge becoming offensive again; I consented to make an exploratory incision.

July 12th:—Patient stronger, temperature $100.3-5^{\circ}$, pulse 120, respiration 50, dyspnoea and cough much better. Chloroform and Oxygen was selected as the anaesthetic. I cleansed and closed by suturing the cervical canal; then dissected up the vaginal tissues to the body of the uterus. Placing the patient in the Trendelenburg position, I opened the abdomen in the median line. Free foul pus was found in the peritoneal

cavity; omentum adherent to fundus and anterior surface of uterus and to right broad ligament. Removing this, well marked evidences of involvement of uterine peritoneum were seen at points of adhesion of omentum. The entire uterus and adnexa were quickly removed, cavity well washed out with saline solution and a quantity left in, when the abdomen was closed tightly. It may be of some interest to note the appendix was examined and found to be the shortest I have seen— $1\frac{1}{2}$ c. m. in length. It was removed by the request of patient and family. At close of operation temperature $102\ 2-5^{\circ}$, pulse 140, respiration 72. She quickly reacted and after reaction was complete, temperature was $102\ 2-5^{\circ}$, pulse 140, respiration 54—pulse good in quality. She needed no artificial stimulants. At 3 A. M. she began to sink and died at 7.53 A. M., July 13th, 1904.

Gross examination of specimen.—Uterus 13 c. m. in length; $7\frac{1}{2}$ c. m. in width; 5 c. m. in thickness. On anterior wall, 2 c. m. in front of right cornua, a dark purplish nodular growth was seen, soft, friable $10\frac{1}{2}$ c. m. in circumference and communicating through wall to cavity of uterus. Fundus was nodular in outline, had a greenish colored, soft spot on apex $2\frac{1}{2}$ by 1 c. m. in size. Right tube thickened, right ovary cystic; left tube and ovary normal. A longitudinal incision of uterus showed on anterior wall of fundus (at ordinary site of placental attachment) an area of purplish, red and greenish friable tissue. Within cavity a quantity of stinking mucopurulent discharge. Numerous nodular growths studded the uterine musculature, perfectly circumscribed and distinct, varying in size from a small pea to a good size olive. Majority of the nodules showed central portions made up of organized blood; all were soft, extremely friable, red in texture. They were limited to upper half of uterine walls, none having invaded the cervix or lower half of the body.

This case varies from a typical case in that there was no involvement of the vagina, the most frequent site for early secondary manifestations; and again in the very extensive and unusually rapid occurrence of secondary manifestations in the lungs; there being no evidence of anything in the lungs or outside of the uterine cavity on June 18 and in 18 days so much involved that the case was hopeless.

The only characteristic danger signal we have in these cases is the irregular or continuous bleeding after child birth, abor-

tion or hydatid growths, and its only positive evidence is found by microscopic examination of the scrapings or of the growth. The absolute duty of the physician is in every suspicious case to curet and examine or have examined by experts the product of the operation.

NECROPSY.

I PERFORMED an autopsy three hours after death with the following findings:

Vagina.—Negative.

Abdomen opened.—Slight post-operative peritoneal congestion seen.

Operated field.—Negative.

Liver.—Markly enlarged; the left lobe extending well over to the left hypochondrium—displacing the stomach upward and backward, apparently cirrhotic. Other lobes congested—gall-bladder negative. Two small areas about the size of a pea, yellowish in color, perfectly circumscribed, found on the upper surface of the right and left lobes respectively.

Spleen.—Soft, congested—no involvement noticed.

Other abdominal viscera.—Negative.

Thorax.—Lungs found on both sides about two-third normal size, pale in color, with numerous pleural adhesions; each lobe from apex to base, studded with many small, light red nodular and distinct growths, varying in size from a pea to a walnut. Cut sections showed growths extending throughout the lung structure: Bronchial tubes enlarged, filled with organized blood: and several of the larger blood channels infiltrated by the substance of the growths.

Heart.—Negative.

Pleurae and Ribs.—No involvement.

Patient gave no evidence of cerebral involvement—and had permission been given to open the head, the brain would have probably showed nothing.

Microscopic Examination.

I. Cellodin sections of the products of the curettage prepared. Specimen No. 1 showed the typical picture of a chorio-epithelioma. Masses of polygonal-epithelioid cells, the majority being mononuclear, surrounded by unicellular or

undivided strands of protoplasm containing numerous *nuclei*; these latter showing in different areas, vacuolization. Areas of circumscribed haemorrhage corresponding to the blood vessels were well marked; these areas showing no trace of an endothelial lining, the blood being limited by the Syncytial strands. Throughout the specimen there was small round cell infiltration.

2. Section of the original growth at the placental site. This showed well—the alveolar arrangement of the Langhans cells and the Syncytium as noticed in the sections of the curettements. Some areas showed the irregular arrangement—in one place the Syncytium predominating and in another the Langhans cells; these latter areas showing the protoplasmic strands irregularly permeating the masses of the polygonal cells. Areas of haemorrhage were again distinctly present. Away from the mucosa were noticed the infiltration of these elements throughout the uterine tissues.

3. Sections of lung metastases—in which the Syncytium apparently predominated. Otherwise the general characteristics were present.

4. Section of the liver metastases—showed also irregular distribution of the Langhans cells and the Syncytium.

5. Section of the right cystic ovary. Throughout this were areas of degeneration—of variable size, surrounded by Lutein masses; Lutein cysts, in other words. The section showed at certain points along the margin, the Germinal-epithelium and just within this layer, developing ovum sacs; and second at a point corresponding to the hilum a mass of cells which at first sight resembled closely a chorio-epithelioma metastasis, but that from other sections studied was probably nothing but a portion of the par-ovarian infiltrated with decidual cells.

The malignant deciduoma or Chorio-epithelioma, a more correct name considering our present views of the tumor—was first introduced to the profession by Säger in 1888, when, before the Leipsic Obstetrical Society, he reported “two unusual cases of abortion.” His investigations at the time, led him to designate the growth that he found “Deciduoma-malignum”—describing it as belonging to the sarcoma group with power of rapidly forming metastases. Prior to this cases of malignancy following pregnancy—both prematurely interrupted and at full term, had been noted and reported by Maier

and Chiari. These were supposed to be either sarcoma or carcinoma; but opinions differed as to the class. The peculiarities of the neoplasm, the fact that it occurred only after pregnancy—that it was more malignant and rapidly fatal than either sarcoma or carcinoma—and that metastases took place with such unusual rapidity—led to a more extended investigation by Säger. Following the report of similar cases in 1890 by Müller and Pfeiffer, investigations were made by this same authority, into the many tumors succeeding pregnancy that had been diagnosed adeno-carcinoma, sarcoma, etc., and in 1893 he published his second paper, bringing forth new views, proposing at this time to designate the tumor “Sarcomadeciduo-cellulare.” Many investigators then appeared, each with his own view differing from others, and each proposing a new name for the growth according to such views. Among the early observers, L. Fränkel was the first to demonstrate the origin of the growth in the epithelium of the Chorion; classifying it as carcinoma. It was not until Marchand published the result of his findings that our knowledge of the tumor took any definite form. He demonstrated the growth as foetal and not maternal, as his predecessors had done, since he found the chorion epithelium—the syncytium and the Langhans cells—to belong to the foetus and to be the essential histologic elements of the neoplasm, these elements in the event of malignancy being simply grafted upon the maternal tissues. Since this report numerous cases have been forthcoming and much valuable literature published concerning the growth—by such men as His, Peters, Schmorl, Rub, J. Withridge Williams, Dorland and Schmauch. The opinions of such observers seem to be coming nearer and nearer though there are still sufficient number of authorities who differ to such an extent with the majority as to render any very positive statement concerning the Histology of the neoplasm impossible at present.

The chorio-epithelioma malignum is a highly malignant type of neoplasm, of rapid growth, occurring after pregnancy at full term—abortion or, as it is claimed in about 40 per cent. of cases after an hydatiform mole; characterized by sudden, profuse haemorrhage, early extensive metastases—cachexia—and a high mortality. Its usual seat of primary “infection,” so to speak, is the site of the chorion frondosum, though in cases developing after the expulsion of a mole, it may occur anywhere in the uterine cavity. Seven cases have so far been reported

where the primary seat was entirely without the uterus, the last recorded case of this series being an "ovarian deciduoma." Dr. Palmer Findley has but recently reported the twenty-first case where the growth occurred primarily in the uterine musculature, the endometrium showing no evidences of the involvement. Schmorl states that where the growth develops after a mole or even in normal pregnancy, cystic degenerated chorion villi or normal villi may be separated and carried to distant organs, there to develop a primary growth. The majority of cases, however, have their origin at the placental site. Here macroscopically it appears as in our case, as a fungoid-like mass, soft, spongy, friable, light or dark red in texture, and made up for the most part, of large areas of blood clots, associated at certain points, with greenish yellow sloughs, giving rise to a highly offensive discharge. Unlike carcinoma or sarcoma, the growth has a tendency to grow away from the uterine cavity and to invade the deeper structures of the uterus—the depth of penetration, according to the views of some authorities differentiating partially the benign and malignant types. The primary growth is of varying shape and size. The secondary growths are usually of a nodular shape, and vary largely in size from a small pea to a walnut or larger. These metastatic formations have the same gross characteristics as the primary—the areas of circumscribed haemorrhage on cut section predominating. The tendency of the chorio-epithelioma is to invade the blood vessels and like sarcoma, it is by these channels that metastasis takes place. Very late metastasis may take place by the lymphatics. It is essentially a vascular tumor; hence the early clinical manifestation, haemorrhage. The presence of the large amount of blood in the growths it is now claimed, it not so much due to the erosion of the blood vessels and their breaking down by the pressure of the growth as it is the vacuolization of the Syncytial masses surrounding the blood channels, and the entrance of the blood into these areas, a phenomenon characteristic and made possible only by the peculiarity in the growth of the absence of endothelial lining of the blood channels. The growths are usually circumscribed and separated rather sharply from the tissue in which they appear. Metastatic formations have been found in nearly all the organs, the more frequent localities being the vagina, lungs, cerebrum, liver, spleen and kidney.

As we consider the histogenesis of the chorio-epithelioma

malignum we are confronted to-day with the phase of the tumor of which we can lay claim to nothing positive or certain. Much investigation has been carried on by the ablest and most scientific men both abroad and in this country, to determine from what tissue or group of cells the growth has its origin. Its histologic elements and their several arrangements we do know. Following the monograph of Marchand, published in 1895, there is to-day generally recognized two types microscopically. You can recognize in some of the specimens I show you and as I have already described in the *post mortem* report, the typical relation of the constituents; namely, strands of protoplasm, irregular in shape and size, staining readily, containing numerous nuclei and showing absolutely no cell division—the Syncytium—surrounding areas of small polygonal usually mononeuclear cells—the Langhans cells, forming nests or whorl like masses as is the common arrangement in an epithelioma. This alveolar type Marchand described as the typical variety. The Syncytial masses—as you can readily notice—show beginning and in some areas extensive vacuolization: a normal phenomenon in the growth. Large areas of circumscribed haemorrhage are seen which may be dilated blood channels but presenting no trace of an endothelial lining as heretofore mentioned—blood channels surrounded by the Syncytium or plasmodium as you may choose to call it. Nowhere in the growth do we have any evidence of mesoblastic or hypoblastic tissue.

A very common element—the “Syncytial wander cells”—are to be seen in one or two of the specimens and really are nothing but detached masses of the Syncytium containing numerous nuclei and causing, by their shape and size, much confusion between the decidual cells and Lutein cell masses. I have been unable to find the chorionic villi in these specimens of the case reported, the presence of which, either in a normal state or showing more or less degeneration, early investigators, principally Gottschalk, and Waldeyer claimed essential to make a diagnosis (positive) of a chorio-epithelioma. To-day it is believed their presence is unessential for a diagnosis and that it is not necessary for the development of metastatic growth, that these villi “in toto” be carried from the placental site to distant parts. The early stress laid upon the presence of the villi especially as to the formation of secondary growths, has been given up in view of the newer theory attributing a special pro-

liferative ability to the Syncytium whereby it is but necessary for bits of the Syncytium to be deported and lodging in a proper nidus, under favorable environments, develop a new malignant neoplasm. Schmauch draws a parallel case in the formation of metastatic tumors from a primary carcinoma by the deportation merely of cells of the original growth. The rapid and early spread of the chorio-epithelioma is better understood in light of this theory, when we but realize that the Syncytium proliferates solely by mitosis and the buds so formed are constantly surrounded by and in intimate relation with, the maternal blood stream and hence can be very quickly and easily broken off and carried on. This explanation holds true in both varieties of this neoplasm; for the second or "atypical type"—according to Marchand differs only in the arrangement of the Langhans cells and the plasmodium. In this type there is the absence of the alveolar formation, and as a rule the Langhans cells predominate above the Syncytium. These cells occur in clusters or masses—of varying size and permeated by strands of protoplasm: seen very nicely in our specimen of the lungs.

A very constant histologic element of these growths is the small round cell. Most of these specimens show a more or less marked infiltration—and it is those specimens which are so highly infiltrated that resemble more closely the sarcoma—and which formerly gave rise to the confusion between the chorio-epithelioma and this latter type of malignant tumor.

From its gross appearance—the alveolar arrangement—the growth resembles a carcinoma. On the other hand early authorities claimed it to be hypoblastic in origin and from the vascularity—metastases by the blood channels, the appearance early in life usually from 18 to 40 years, and the round cell infiltration, pronounced it as belonging to the Sarcoma family. Whether the carcinoma or sarcoma is its prototype, depends upon the recognition of its origin from the Syncytium and Langhans cells or from the decidua and as to whether the former elements are foetal and epithelial or maternal and endothelial. The source of the growth has been traced by different men to the stroma of the chorionic villi; to decidual cells; to the Syncytial cells alone and to the Langhans cells alone. Within late years the Syncytium and Langhans layers have been held as the responsible tissue. The authorities thus agreeing—again entering into argument by some claiming the Syn-

cytium as arising from the endothelial lining of the maternal blood spaces—and others claiming it to be identical in origin with the Langhans cells and hence foetal epithelium. Abel in his 1901 edition agreed with Pfannestiel and claimed the maternal endothelial origin for the Syncytium, making our growth an endothelioma, closely associated with sarcoma. The investigations of L. Fränkel, Marchand, Ruge, Schmauch and others prove that the Syncytium is a portion of the Chorion villi, hence is epithelial and belongs to the foetus. Researches of Van Heukelom, Peters, Pels-Leusden and Herzog demonstrate this epithelial origin. These investigations mean, that the Syncytium and Langhans layer are intimately connected in development, Schmauch saying, that the former is merely a stage in the development of the Langhans cells—agreeing with Marchand that the two are one and the same tissue. Schmauch, in studying metastases in the brain, in one case deduced the facts that the source of such metastases was deported Syncytial wander cells—and that these cells undergoing proliferation—give rise to the giant cells—with vacuolization and the formation within these vacuoles of small epithelioid cells resembling closely those of Langhans. He found areas of polygonal cells identical with Langhans—surrounded by masses of Syncytium and concluded it, under the light of his studies mentioned, highly improbable that these cells could “break in from the outside.” The Syncytium must have been their origin. The researches of Pels-Leusden likewise prove that Syncytial wander cells can and do give rise to cells identical with Langhans. In view of all which the Syncytium must be closely related to the Langhans cells in development and both must have their origin in the same parent trophoblast: that the one is but a stage in the development of the more highly vitalized element or tissue. The Langhans cells being conceded as portion of foetal epithelium, the Syncytium necessarily is of epiblastic origin and the malignant tumor it is capable of producing is, thus an epithelioma.

To exclude the decidual, maternal-origin of the growth, we have but to consider the very pretty example of this tumor found in various teratomas recorded, examples which the upholders of this maternal theory cite as conclusive argument. Typical growths have been reported in teratomas of several different organs—particularly, however, of the testicle. We can readily explain the presence of such a growth in these on the

ground of included foetal tissues—foetal membranes say—the Syncytial masses of the normal chorion villi thus present, under the necessary stimulation and absence of the proper resisting power in the surrounding tissues, undergoing the stages of proliferation—vacuolization and the production of small epithelioid—mononuclear cells. It is true we are hereby narrowing ourselves by considering the Syncytium alone—and exciting the criticism that it is just as possible for decidual cells to be present in the teratoma—to undergo proliferation. How do we know that these cells do not give rise to the malignant neoplasm? Such criticism must accept as its basis the Syncytium as endothelium, whereas we have just seen very clearly the Syncytium to be epithelium. It is difficult at times to accurately differentiate Syncytial masses and decidual cells—nevertheless they can be differentiated by close observation of the relations of each in the specimens studied. They are essentially and always different elements—decidual cells may proliferate but cannot give rise, in the light of present investigations, to a true chorio-epithelioma. In view of this very fact the name formerly used—“deciduoma”—is a misnomer.

In the Chorio-Epithelioma we are dealing with an epithelial growth and one which belongs to a class of its own—it is neither carcinoma nor sarcoma—even though in some respects it may resemble both of these malignant types.

It might be well in this connection here to briefly review those cases of this type of malignant tumor in which the uterine mucosa at the chorion frondosum remained uninvolved, the primary nodule having been found within the uterine musculature; and those cases, still more remarkable, in which the primary growth was found in some distant organ, notably the kidney—the uterus and adnexa being absolutely free of infiltration. By the generally accepted explanation of these rare cases—the foetal origin of the chorio-epithelioma is more markedly impressed upon us. This explanation consists in the theory of the method of metastasis as we have already mentioned. Simply the Syncytial buds arising from the proliferation occurring in the Syncytial layer of the normal chorion villi—or in the degenerated and more active plasmodium of the hydatiform moles—being carried into the deeper uterine structures to give rise to the primary malignancy or to some other part or organ of the woman—the proliferation of this structure occurring

at the placental site being checked by the surrounding tissues—or the masses formed here being absorbed or in some manner destroyed. These cases are then epithelial foetal tumors grafted upon the mother. There are some, doubtless, who claim this theory to be *nil* in cases where the primary tumor appears when there are present no chorion villi in the uterus—when the woman, then, is not pregnant, concluding that pregnancy is not a predisposing factor. Pregnancy, however, must be present for the development of this new growth—the pregnancy may have been one week, six months or a year previous. Portions of Syncytial or placental tissue itself may be present in the woman and remain latent for months or years. No cases have yet been reported with the exception of those occurring in the terotomas of the testicle and heart where the history of pregnancy could not be obtained; and as to these abnormal growths, they develop from a “foetal inclusion.”

In many cases of pregnancy—normal or abnormal—it is today claimed there are present to a greater or less extent, scattered throughout the uterine mucosa and deeper tissues—Syncytial cells—and it is being urged that it is the presence of these bodies in a certain proportion that determines the onset of labor at full term. As far as we are concerned with this theory we recognize the danger of a destructive morbid growth in every woman after conception has taken place. The question naturally arises, why is it we do not have this morbid process appearing in every case of pregnancy, or at least in a greater percentage of cases than in which it has been met? The aetiology as far as predisposing factors go, is extremely indefinite. Heredity has no standing as a causative factor. The age, it is a clinical fact, varies from 18 to 40 years. Hydatiform mole precedes from 40 per cent. to 80 per cent. of all cases and is apparently the chief factor predisposing to the growth. Many moles, however, have not been followed by malignancy, and in many cases of molar pregnancy, Syncytial masses have been demonstrated both in the uterus and neighboring parts, malignancy not following. Dr. Findley states: “It is evident from the observations of Veit, Webster, Pick and others that the invasion of the deeper structures of the uterus or even of the structures beyond the uterus by chorionic-epithelium is not evidence *per se*, of malignancy; that on the contrary, Syncytial masses are found in the uterine musculature and are deported to distinct parts of the body by veins in normal pregnancy;

that soon after the termination of pregnancy, they disappear." In speaking of the so-called benign and malignant forms of the chorio-epithelioma this same author tells us that "there is a great variation in the rate of growth in the epithelial elements—the explanation not only lying inherent within the cell elements—but also in the degree of resistance offered by the uterine tissue." The power of resistance held by the tissue in which the Syncytial masses are found seems to be the best explanation for the presence or absence of this neoplasm. McFarland, in a recent article holds to this view, describing a certain "cytolytic equilibrium" between mother and foetus. In the event of the maternal tissue failing to develop antagonism sufficient to resist the proliferative power of the foetal tissues, Chorion-epithelium would penetrate the uterine tissue to give rise to a primary malignant growth and to metastases as far as the resisting power of the maternal tissues would permit. Any diseased condition arising in the mother—lessening the vitality of her tissues and placing their resistance to external invasion below par—makes her a likely victim of a malignant tumor. Findley reports a case where a chorio-epithelioma occurred in a case of extreme anaemia. Schmauch, in a recent paper, goes a step further to clearly state the modern view of the latest investigators as to the nature of this maternal antagonism to foreign, grafted elements; and by what means, masses of Syncytium are checked in further development—or destroyed entirely. To quote from this authority: "We owe to Ehrlich's ingenious investigations quite a new insight into the aetiology of the cell. According to his side chain theory, the animal organism has the power to produce antibodies against foreign cells and their products—so-called cytolsins and heterolsins. Now the organism of the child is not a foreign body in a true sense; it belongs to the same genus. But even in animals of the same genus, Ehrlich and Morgenroth, by devising special methods, have succeeded in producing cytolsins-autolsins. These antibodies necessarily have to be formed in the blood of the pregnant woman against scattered cells and cell products. Veit, Halban, Ascoli, have taken up this idea and Veit has called this body 'Syncytiolisin.'" Immunity from the malignant growth, then depends upon the presence or absence of certain "antibodies"—having the power of absorbing or in some manner destroying foetal remnants. The presence or absence of these Syncytiolins in turn depends upon the healthy or diseased condition of the maternal system.

Our résumé would not be complete were we not to mention the theory recently advanced by Recasens, whereby he claims the chorio-epithelioma due to a specific malignant power inherent in the chorion epithelial elements, the neutralization of which by the secretions of the thyroid gland and probably of the ovary prevents the development of this rapidly fatal tumor.

Such are the theories as to the presence of this new growth.

And so with the study of every new case of chorio-epithelioma occurring, will new facts be brought to light and new theories be promulgated. To-day the best we can do is to analyze and bear in mind every new theory advanced until our knowledge of the tumor begins to take some definite shape. We have, in the last few years, made marked progress towards something tangible; and with interest awakened in Obstetrician and Pathologist alike in this new growth, more accurate diagnoses will be made and more rapid progress towards definite knowledge be the result. We must be satisfied now with collecting the ideas of the best scientific investigators and be on the alert for something better. Though the histogenesis may be foggy, yet the clinical, practical, side of this neoplasm cannot be mistaken. We must know the clinical course; we can always be suspicious of the foe and be always armed to recognize the tumor in its incipency, tentatively at least, when there is time to do something for the unfortunate woman. Dr. Dudley, in his recent work, in speaking of the prognosis of the Chorio-epithelioma Malignum, says: "Seventy-eight per cent. of all cases terminate fatally within six months." This in itself without further addition of words to detract from its forcefulness, is a sufficient plea for an early diagnosis by the microscope and complete extirpation of the growth before it is too late—before metastasis has occurred.

Allow me just a moment for a brief summary of these, my gleanings.

SUMMARY.

1. "All the cases are essentially of the same nature, although they present individual differences due to varying conditions in the history of their development."—Marchand.

2. All the tumors are epithelial in origin—the chorion-epithelium being the source.

3. The elements composing the tumors are (a) Syncytium, (b) Langhans cells—these two being one and the same tissue

or layer of cells—derived from the same parent trophoblast—the “Syncytium” being but a stage in the cell life.—Schmauch.

4. The tumors are highly vascular; the blood channels are limited only by Syncytium, there being no evidence of mesoblastic or hypoblastic elements in the growth.

5. Metastasis takes place early and rapidly by blood channels.

6. From 40 per cent. to 80 per cent. of cases follow Molar pregnancy. It also occurs after abortion, and full term pregnancy. Pregnancy is essential for its development.

7. Whether Syncytial masses and placental islets normally present, shall remain benign and latent or develop into malignancy depends upon the presence of anti-bodies called “Syncytiolisin” —within the maternal system.

8. Death occurs in about 78 per cent. of all cases.

REFERENCES.

Allbutt and Playfair, *System of Gynaecology*.

Marchand, *Monatssch. f. Geburtschule*, 1895.

Sänger, *Arch. f. Gynaekologie*, Vol. xlv.

Haultain, *Journal Brit. Gynaec. Society*, 1899.

Abel, *Gynaecological Pathology*, 1901.

Racasens, *Centr. blat. f. Gynaekologie*, 1904.

Dorland, *University Med. Mag.*, 1897

Williams, *Uterine Tumors*.

Cullen, *Cancer of the Uterus*.

Schmauch, *Journal Amer. Med. Association*, June, 1904.

McFarland, *American Journ. Obstetrics*.

Williams, *Amer. Jour. Gynaec. and Obstetrics*, 1895.

Metcalf, *American Journal Obstetrics*, Sept., 1904.

Safford, *American Journal Obstetrics*, Sept., 1904.

Edgar, *Practice of Obstetrics*.

Findley, *Diagnosis—Diseases of Women*.

Dudley, *Principles of Gynaecology*.

THYROIDIN IN NOCTURNAL ENURESIS.—Dr. Lambreghts has used thyroïdin 3x. trituration in enuresis with much success. Feeble, nervous, irritable children seem to be helped by this remedy. The author recognizes, at the same time, the occasional necessity for operative procedures when the enuresis depends upon some mechanical cause.—*Clinique*.

SOME ARCHITECTURAL CONSIDERATIONS OF THE HUMAN SKELETON.

BY H. L. NORTHROP, M. D.

(Read before the Baltimore Homœopathic Medical and Surgical Club.)

"Behold this ruin! 'Twas a skull
Once of ethereal spirit full;
This narrow cell was life's retreat,
This space was thought's mysterious seat.
What beauteous visions filled this spot!
What dreams of pleasure long forgot!
Nor love, nor joy, nor hope, nor fear,
Has left one trace of record here.

"Beneath this moldering canopy,
Once shone the bright and busy eye;
But start not at the dismal void—
If social love that eye employed,
If with no lawless fire it gleamed,
But through the dews of kindness beamed,
That eye shall be forever bright,
When stars and sun have lost their light.

"Within this hollow cavern hung
The ready, swift, and tuneful tongue;
If falsehood's honey it disdained,
And, when it could not praise, was chained,
If bold in virtue's cause it spoke,
Yet gentle concord never broke,—
That silent tongue shall plead for thee
When Time unveils Eternity.

"Say, did these fingers delve the mine,
Or, when its envied rubies shine?
To hew the rock, or wear the gem
Can nothing now avail to them.
But if the page of truth they sought,
And comfort to the mourner brought,
These hands a richer meed shall claim
Than all that wait on wealth, or fame.

"Avails it, whether bare or shod,
These feet the paths of duty trod?
If from the bowers of ease they fled
To seek affliction's humble shed;
If grandeur's guilty bribe they spurned
And home to virtue's cot returned,—
These feet with angel wings shall vie,
And tread the palace of the sky."

My dear friends, it will be my pleasure this evening to call your attention to a few of the architectural features of that wonderful part of our anatomy, the human skeleton.

Can any conscientious student of this osseous pile fail to recognize its perfection of architectural detail, almost limitless adaptability and marvelous beauty? It is incomprehensible. Of what kind of evolution is this human monument the accidental product? Is it the chance effect of civilization, the haphazard result of ever-changing environment, or a by-product of animal necessity? It is true that that veteran gladiator, the human body, has risen to many an emergency when its own welfare and ends to be subserved were endangered, "has lived on bear meat and ground-nuts by choice, mussels and sea-weed by necessity, and sucked its paws when it could get neither." It has done so, and can do so again, and again, because there is a Divinity which has shaped its ends and has likewise planned its destiny. However, if I should encourage a discussion of the theory of evolution, I might merit the criticism of being a fool who stepped in where angels feared to tread.

The human skeleton has served as a theme for bard and muse, for wit and jester, but to-night let it claim attention of students of artistic anatomy who are bent upon discovering a few of its hidden beauties and wonderful provisions for contributing to man's happiness and efficiency in battling with the world for his existence.

The bones of the human body depend for many of their physical characteristics upon the kind and proper proportion of the ingredients entering into their composition. Analyses show that 57 parts consist of phosphate of lime, eight parts of carbonate of lime, one part of fluoride of lime, and one part of phosphate of magnesia; 67 parts, then, constitute the mineral ingredients, the remaining 33 parts consisting of animal matter.

This animal matter though only a third of the osseous tissue, is quite essential to both the stability and the flexibility of the bone, and that it plays its part well is proved by the fact that it has been found unaltered in bones which have lain for more than three thousand years.

Again, the predominating salt in the mineral make-up, the phosphate of lime, is an interesting one. It is a peculiar salt, being especially peculiar to true osseous tissue. Its marked

excess over the carbonate of lime, 57 parts of the former to eight of the latter, attach to it great importance in the composition of bone, which differs so strikingly in this respect from shell, where the carbonate of lime exists almost to the exclusion of the phosphate. Or, to put it more forcibly, *wherever true bone is found*, there phosphate of lime predominates, and *there also is to be found a vertebral column*. In other words, phosphate of lime is peculiar to the highest and most complex order of animals, the vertebrates. This is a significant fact. The carbonate is a simpler salt, much more abundant in the inorganic world, and answers the purpose of the earthy material of shell sufficiently well, being there united with only a small amount of animal matter. But in true bone, the greater proportion of animal substance rendered necessary for the purposes of growth, etc., requires the use of the phosphate, which is capable of forming a harder compound with the animal material than the carbonate could. In the hardest part of the skeleton, the enamel of the teeth, it exists in still greater proportion,—more than 80 per cent. It furthermore possesses the same property as the animal matter of preserving its composition for a great length of time, it having been found unaltered in fossil bones.

The animal and earthy materials are blended so admirably and in such proper proportions as to produce a tissue nicely adapted to the purposes required. Bone is exceedingly strong, possessing, as has been proved by experiment, twice the resisting power of solid oak. It is also highly elastic, as evidenced by the test of placing a clavicle at right angles against a firm body and striking the free end a hard blow with a hammer, when the bone will rebound a distance of two feet. Of course, this elasticity is a highly important quality, serving to break the shock from external violence and thus aiding materially in preventing injury not only to the bones themselves, but also to soft structures and delicate viscera. They are more flexible and relatively lighter in infancy and childhood, the better to withstand the vicissitudes of early life. In the muscular adult we find the bones relatively denser and therefore stronger and heavier. It has been estimated that in a man weighing 150 pounds, there are 28 pounds of skeleton. In old age, when the vital and muscular powers are waning, the bones again become lighter, but they never regain their pristine elasticity, and they are therefore more porous and fragile.

So well is the proper balance between the animal and the mineral constituents preserved, however, that we seldom hear of a fracture of a healthy bone occurring from muscular contraction. While many cases of so-called spontaneous fractures are on record, it is highly probable that a predisposing diseased condition existed which was in reality to blame for the accident. I saw, quite recently, a well-developed, perfectly healthy boy seventeen years of age, who claimed that the fracture of his right humerus, from which he was then suffering, was caused by making moderate effort at throwing a stone. I learned that he had been forbidden to play football, and I believe the accident happened during a mass play, but he was ashamed to acknowledge it.

The same fine adjustment, or proper proportion, exists between the compact and cancellated parts of bone, while in delicacy, in abundance, and in exquisite arrangement of its cancellated structure, however, the human skeleton surpasses that of any of the lower animals. By the hollowing out of the interior the bone is rendered much lighter than it would otherwise be, with but little loss of strength, while the expanded articular ends, possessing only a thin layer of compact bone for their exterior covering, are buttressed by the systematic placing of the partitions of the spongy texture at right angles to the surface which must support weight, or resist the traction of powerful muscles.

To illustrate, in the upper end of the tibia the osseous partitions are arranged perpendicularly and thus assist the tibia in supporting the weight of the parts above; in the upper end of the femur they interlace and cross each other to form a series of gothic arches, terminating at right angles to the surface of the trochanters, neck and femoral head, thus ensuring a desirable lightness and the necessary strength to protect the bone against the pull of the powerful hip muscles, and sufficient to bear the superincumbent weight. This plan of hollowing out the interior of bones is even more elaborate in birds, in many of which we find the medullary canals filled with air.

Again, as far as the skeleton is concerned, Nature abhors a straight line (just as she abhors a vacuum), and a careful examination will prove that there is not a single long bone in the skeleton which is literally straight. They all possess curves and twists which enhance their flexibility and the better enable them to break the force of external violence. More-

over, these curves, combined with the irregularity and obliquity of nearly all joint surfaces, impart ease and grace of movement and of carriage which could not be obtained so effectually in any other way.

The projections,—trochanters, tuberosities, etc., of the skeleton, attract our attention; we know that they serve for the attachment of muscles and increase their leverage. This they do by placing, or lifting, the tendon of insertion away from the axis of movement of the joint. Where speed and range of movement, rather than power, are sought, these processes are found to be small, or suppressed, as in the case of the greater and lesser tuberosities of the humerus. On the other hand, where strength and stability are necessary, even at the expense of rapidity and range of movement, the bony projections are robust, substantial, and carry the tendon of the muscle farther away from the axis of the joint. Of this we have a good example in the trochanters of the femur, in whose muscles power of contraction is of great necessity, and both range and speed are therefore sacrificed. Compare the skeletons of the deer and the rhinoceros, and the same differences will be found: the former is fleet of foot and agile, and its bony processes are subdued; in the powerful, heavy, slowly-moving rhinoceros, however, they are of huge size.

To me it is an interesting fact that bone is developed along the lines of addition and subtraction. At first the bone is solid, virtually, then comes the absorption of the interior, and the medullary canal, the cancellated spaces, and the Haversian canals are formed. *Pari passu* with this subtracting process, new osseous material is being deposited and moulded upon the exterior by the periosteum, and thus the two go hand in hand until the fully developed state is reached.

The length of a bone is increased according to the same plan, the growth taking place by the addition of new osseous tissue, and not by any method of interstitial expansion. This was proved long ago by John Hunter, the celebrated Scotch surgeon and anatomist, who bored two holes in the tibia of a shoat, put a lead shot into each hole and measured the distance between the holes. When the pig was fully grown Hunter examined the tibia, and found the distance between the holes to be the same as originally.

The vertebral column has been appropriately called the axis of the skeleton, not only because of its position, or direction,—

not merely because it is that division to which all other parts are attached, directly or indirectly, or from which they appear to emanate, but more especially for the reason that it "is the most distinguishing and important part of the skeleton of a large, and that the highest, class of the animal kingdom." It is the first part of the skeleton to be formed in the embryo, for the notochord, or chorda dorsalis, in which the cartilaginous vertebral bodies soon appear, develops simultaneously with the neural groove. The greater part of the notochord thus is early converted into the bodies of the vertebrae, those portions between the bodies changing into the intervertebral discs. In some fishes the notochord persists and is continuous from one end of the vertebral column to the other through the center of the bodies, which, in them, are ring-shaped, and not solid, as in other vertebrates.

The main features of this "back bone" are to be found in all members of the vertebrate class. In each, whether fish, bird, reptile, or mammal, it consists of a series of bones placed one above, or in front of, the other, called vertebrae. These vary in number and in structural detail, but in gross architecture they are identical.

This is well illustrated by comparing an ophidian (a boa constrictor) with a chelonian reptile (a turtle). Both are vertebrates, though their vertebrae vary in number, size, and shape. Indeed, it is with the whole vertebrate class as it is throughout the Natural world. Scientists tell us that there are no two grains of sand upon the shore, no two blades of grass in the field, that are exactly alike. And it is the same throughout the vertebrate series of animals, as well as with different members of the same group: we find a pronounced similarity in general structure, but a positive dissimilarity in detail. How different a segment of the thoracic portion of the vertebral column is from a piece of the sacrum, or the last bone of the coccyx. The differences are due to different uses and duties imposed, and to the modifying influences of environment and associated parts and structures.

I wish to remind you of the rarity of congenital defects of the vertebral column, instances where such have been found having occurred in the most imperfect monsters. Even the usually insignificant defect of the vertebral wall which permits a spina bifida, which is the commonest form of congenital anomaly of the spine, occurs only in one in every 1,000 chil-

dren, and is located most frequently (three-quarters of all cases) in the lumbo-sacral region, where the medullary groove closes later than elsewhere. Moreover, it is frequently associated with other evidences of arrested development, such as hare-lip, cleft-palate, strabismus, talipes, or a defect in the wall of the cranium permitting some form of encephalocele. This constancy and regularity of perfect development is, to me, a most pertinent expression of the importance of this distinguishing axis of the human skeleton.

And we will find exemplification of the same fidelity to type if we examine the different sections of the vertebral column. The number of vertebrae, seven cervical, twelve thoracic, five lumbar, five sacral, and four coccygeal, is remarkably constant, and this is in no part of the column truer than in that section most closely associated with the brain by anatomical position, the cervical section. Here, no matter how long, or how short the neck, the number of vertebrae is uniform throughout the entire mammalian class, with but two exceptions. These are the three-toed sloth, which has nine and the sea-cow, which has six. Well may our cervical vertebrae say, with Jean Ingelow, "We are Seven."

What an admirable distribution and arrangement of joints is to be found in the spinal column. Consisting of 33 separate and superimposed segments, they are so united that only a slight amount of motion is permitted between any two of them, while the total range of movement enjoyed by the entire column is very great. As a result of this architectural arrangement of pieces and joints, with their nicety of adjustment, the column possesses wonderful flexibility and great variety of movement, while the delicate cord within is adequately protected from sudden bends or twists. Besides, if the column were capable of free range of movement at any single point, not only would the cord be liable to suffer damage, but such an arrangement would necessarily be attended by great loss of strength. According to the present anatomical arrangement, however, great strength is combined with sufficient mobility.

The flexibility of the column is further increased, first, by the interposition between the vertebral bodies of fibro-cartilaginous plates which act like buffers and lessen the force of a jar, or fall, and second, by the normal antero-posterior curves found in the several regions. These curves, it will be observed,

alternate in their direction: in the cervical region the convexity is forward; in the thoracic, backward; in the lumbar, forward; while the sacro-coccygeal curve is backward.

To illustrate how perfectly the column is constructed, and how capable it is of carrying weight and supporting the head above, let us notice that the plumb-line dropped from between the occipital condyles (where falls the line of gravity of the head), passes through the odontoid process of the axis, and then intersects the points of confluence of the three upper, (the flexible, or movable) antero-posterior curves, viz., the cervical, thoracic and lumbar. If prolonged downward, the line passes just in front of the promontory of the sacrum and bisects a tranverse line drawn through the center of the femoral heads. Thus it appears that the center of gravity of the encephalon is placed directly over the heads of the femurs, and that the line of gravity coincides with the points of confluence, *i. e.*, the chords, of the curves of the vertebral column.

Passing on to a consideration of the architecture of the skull, one fundamental principle of its development to be remembered is that the base is formed in cartilage, the sides and vault in membrane. The base offers a suitable support for the rapidly growing cerebrum, whose enlargement is permitted by the membranous covering which later is converted into a number of movable, elastic and more or less loosely connected bones. Thus the passage of the head through the pelvic cavity at parturition is facilitated, and variations of intracranial tension are accommodated. Let it be understood, therefore, from these observations, that the size and shape of the brain do not depend upon, and are not regulated by, the size and shape of the skull. In fact, it is exactly the reverse: the size and shape of the skull are governed by the size and shape of the brain. The skull is moulded upon the brain; it grows if the brain grows; it contracts (in old age) when the brain contracts. "It is subservient to the brain, and there can be no question but that the size and general shape of the brain may be estimated with tolerable accuracy by the size and general shape of the skull." It must be remembered that external irregularities do not by any means always correspond to similar irregularities of the cerebral cortex, as phrenologists would have us believe, although probably the weakest point in phrenology is the unwarrantable assigning of certain mental faculties to certain localized cortical areas. It is not so much the slight

differences which may, and do, exist between skull and brain, as it is our lack of knowledge of the physiology of the brain and of its finer functions, that render the stand taken by the phrenologist untenable.

The bones of the skull, like the long bones, possess a cancellated interior, here known as the *diplöe*. This does not develop until about the tenth year of age, and varies greatly in thickness in different skulls. The *diplöe*, and therefore the bones themselves, have been observed to be thickest in small skulls,—the skulls of idiots; in other words, where the brain is small. We here see an anatomical reason for employing the term “thick-headed,” as a synonym for “stupid.” Idiots are stupid and, anatomically, as well as mentally, they are “thick-headed.”

Let us not forget the intimate adhesion of the dura, as the endosteum, to the inner cranial wall, and the manner in which it forms the venous sinuses. Firmly attached to the bony wall along their respective routes, the dura offers a firm, unyielding, or non-collapsible wall to the venous channel, in which the outgoing current is uninterrupted by the pressure of the encephalon. We know of the elaborate distribution of arteries to insure an equable intracranial supply, and here is just as admirable and effective an arrangement for the removal of the venous blood from the delicate soft mass of nervous tissue.

“The great proportionate size of the cranial to the facial part is the grand characteristic of the human skull, and it corresponds with the superior power which man possesses of appreciating external impressions, of comparing them, and drawing inferences from them.” It is this that places man high in the animal scale,—that makes him “the apex of creation.” The relatively large, rotund, symmetrical brain-case, placed above, rather than behind, the retiring facial element held, as it were, beneath the crowning cerebral hemispheres; the high, more nearly vertically directed forehead and prominent frontal eminences; the forward position of the foramen magnum, close to the mid-point between the frontal and occipital poles; the retiring zygomatic arches, which are not visible in the orthognathous skull when viewing the calvarium from above; the nearly vertical mandibular ramus; and the presence of a chin, or mental process (a special feature of the human skull); these, in contradistinction to just the opposite conditions in the skull of his nearest neighbor, the ape, are some of the rea-

sons which explain man's exalted position in the animal scale.

Let us now note the universal difference in the diameters between man's thorax and that of all the lower orders of mammals. In the latter the antero-posterior diameter of the thorax exceeds the transverse: in man the transverse diameter is greater than the antero-posterior. This assists in more easily balancing the body in the erect position, and satisfactorily explains why man, when exhausted by work, or by illness, or when dying, usually lies upon the broad of his back. But when one of the lower animals sleeps, or dies, the shape of its thorax necessitates its lying upon its side. The position of rest, of comfort, or of exhaustion, therefore, is largely determined by the shape of the thorax.

In many animals the thorax nearly reaches to the pelvis, but the human thorax is shorter and curves away in front, the lowest ribs being short and freely movable, while those above slope upward to meet the sternum. This shortened condition of the thorax must not be used as an anatomical argument in favor of wearing tightly-laced garments, for it is rather intended to permit a greater degree of flexion of the vertebral column, the marked advantages of which need not be detailed.

Of the many interesting architectural features associated with the clavicle, but one will be presented here. That concerns its development. Beclard states that as early as the thirtieth day after conception a center of ossification appears near the middle of the bone. About the age of 20 an epiphysis develops at the sternal end and does not unite with the shaft until 25 years. Humphry says: "It is difficult to conceive what purpose it can serve, being of small size, developed so late, and remaining separate from the shaft for so short a period."

Do not these facts concerning the development of the clavicle attach to it unbounded importance as a bone? It is the first bone of the skeleton to commence its ossification; it is one of the last, if not the last, to complete its ossification; it forms the only osseous connection between the upper extremity and the trunk; it is associated with that very active, especially endowed, highly intelligent member of man's body, his upper extremity; and it carries the shoulder out and lifts it away from the wall of the thorax, within which are placed the permanently active vital organs, the heart and the lungs. Is it not essential that all of these important objects should be attained, and these necessary conditions fulfilled? For these good rea-

sons, therefore, plus the advantages of being broad-shouldered and strong-shouldered, is the clavicle constructed and developed in the way that it is.

CHELIDONIUM AND LYCOPODIUM : A COMPARISON.

BY LAWRENCE M. STANTON, M. D., NEW YORK.

ONE says Smith and Jones are alike as two peas in the pod ; another, did you ever see two men so utterly different as Jones and Smith? So it is in everything we regard. One sees always similarity and another always dissimilarity, but the all-round vision is the ideal toward which we strive and he who has it is the true seer.

The longer we live the more we find like things essentially unlike, and even in our *Similia Similibus* it might be found that similarity is on the surface only, if one had penetration to see below it. Think, too, of the *difference* between a low and a high potency of the *same* remedy.

However, the point I wish to make is that only by the recognition of likeness can we ever truly discern difference, and that through the comparative study of drugs we learn best to know them as distinct characters—great characters that can in no wise be mistaken for other great characters. *Chelidonium* and *Lycopodium* run very close along certain lines, wherein then are they alike?

Both are right-sided remedies. In *Lyc.* the pains and complaints begin on the right and go to the left side.

Chel. Lean, spare subjects with abdominal plethora. Blondes.

Lyc. Lean, spare subjects, usually dark it is stated. I believe, however, that *Lyc.* is quite as often the remedy in blondes as in brunettes. *Lycopodium* children are lean and scrawny with well developed heads. Here, I take it, we have the foreshadowing of the adult condition under *Lyc.*, *i. e.*, "Persons of keen intellect but of feeble physical development," and I believe that this well developed head of the *Lyc.* child is not to be mistaken for the large head of remedies like *Calc.*, *Calc. phos.* and *Sil.* The *Lyc.* mind is alert, sensitive, though sadly disordered, while the *Calc.* baby is stupid. The one is brain, the other mere body. The key to the situation is the intellect.

But to return to our subject. Both Lyc. and Chel. have right-sided headaches relieved by eating.

Both have bitter taste, and it is quite as characteristic of Lyc. as the sour taste which is supposed to be distinguishing.

Chel. Desire for very hot drinks; stomach will not retain drinks unless almost boiling.

Lyc. Aggravation of stomach symptoms by cold drinks; warm drinks ameliorate. This is an exception in Lyc. for almost all its complaints are aggravated by warmth, in this resembling *Pulsatilla* very strongly.

Chel. Gnawing anguish in stomach, but no real hunger; relief of all stomach symptoms after eating.

Lyc. Excessive, canine hunger, but ever so little produces a full feeling.

Both have hepatic and renal colic, Bright's Disease, and red sand is found in the urine. Both have diabetic urine.

Chel. Spasmodic pain in the liver and right kidney, worse from 4 to 9 P. M.

Lyc. Pain in the liver and right kidney from 4 to 8 P. M., as well as the general aggravation between these hours so common to Lyc.

Chel. Has a dry cough, in paroxysms, at 4 P. M., reminding one of the Lyc. cough and aggravation beginning at this hour.

Chel. Stitching pains in the right side of the chest, worse from 2 to 6 P. M. Lyc. covers this almost as well.

Chel. and Lyc. have fan-like motion of the wings of the nose. In right-sided pneumonias especially, with this fan-like movement of the *alae nasi*, Chel. and Lyc. must be carefully compared. Frowning, when present, as I have verified in practice, points to Lyc.

Some physicians place little value upon this symptom "fan-like motion of the *alae nasi*," thinking it an almost inevitable one in cases of choked lungs or otherwise forced respiration. On closer observation, however, it will be seen that it is not synchronous with respiration; indeed, that it is found where respiration is in no way involved. It is one of those characteristic things and therefore immutable. Remedies having this symptom are: *Ammoniac*, *Ant. cart.*, *Brom.*, *Chel.*, *Iod.*, *Kreos.*, *Lyc.*, *Merc. i. f.*, *Phos. Spong.*, *Sulph.*, *Sulph. acid.* In a note in my repertory I have added *Thuja* (clinical) and *Tuberculinum* (clinical). Under *Thuja* it reads "spasmodic restlessness of the wings of the nose," but I see no distinction.

Chel. The right foot as cold as ice, the left natural.

Lyc. One foot cold, the other hot (also China, Dig., Ipecac, Puls.)

I think the sour smelling sweat is quite as marked in Chel. as it is in Lyc., and they both perspire upon the slightest exertion.

In searching for the deep aching remedy in old, putrid, phagadenic ulcers if you think of Lycopodium think of Chelidonium.

In right-sided rheumatism, especially of the right foot and ankle, Chel. will often be the remedy instead of Lyc. Compare them carefully.

Do not think because you cannot discover involvement of the liver or find the characteristic pain under the right scapula that Chelidonium is not your remedy. Parenthetically, too, it is worth while stating that Lycopodium is frequently the indicated remedy when there is not the 4 to 8 P. M. aggravation. Many symptoms of Chel. are worse at 4 P. M. or the latter part of the afternoon, while under Lyc. it is more definitely between 4 and 8 o'clock.

Dr. J. H. Clarke, writing of Chelidonium, says: "Its closest analogue is Lycopodium, with which it holds a complementary relation. I have often cured with Chel. when Lyc. was apparently indicated and failed to act well."

ELECTRICAL APPLICATIONS FOR THE GENERAL PRACTITIONER.

BY WILLIAM F. BAKER, A. M., M. D.

(Being a Clinical demonstration before the Germantown Hom. Med. Society, Oct. 17, 1904.)

IN presenting to you this evening a few thoughts concerning the application of electricity by the general practitioner to medical cases the writer is aiming to answer the oft-asked question "of what value is Electricity in the treatment of disease"? Or better, "What is the place of Electricity in the therapeutics of the general practitioner?" To be receptive of these few thoughts we will have to ask of you to assume the position of a criticising listener, rather than resting under a biased opinion. Your mental attitude must be, however, opposed to those who denounce it and perhaps say as one said that "he was struck with lightning," and so great an amount of electricity

did him no good, and likewise opposed to those who would claim it a "cure all" and give way to public demand for electricity by saying the battery will do good therefore you had better purchase one and use it daily. The electric battery should be used only intelligently and in the hands of an intelligent operator, and it behooves the general practitioner to awake to this fact, giving to his clientele what they demand, thus saving them from going to get it elsewhere even though they be taking your medicine and advice. You will hear it said on all sides that results are not so gratifying, hence so much disappointment, but let it be remembered that electricity has its sphere and its limitations just as other therapeutic measures have theirs, then will be seen the rationale of its use. A well equipped electrical corner should be a part of every man's office, and there we may keep electricity in the treatment of disease, in the hands of the profession.

A modest outfit would consist of one Faradic and Galvanic battery, diagnostic lamp and cautery, and a liberal supply of electrodes of all characters. This apparatus may be had singly or arranged on a wall cabinet such as I have here. I will say nothing concerning the merits of any one, but will leave that to your selection. Where the street current can be had, the apparatus may be run on a much cheaper basis and while at first it may seem expensive, it is cheaper over a long period of time.

General Effects.—The principal effect of electricity is on the blood vessels, causing them first to contract then dilate, hence the circulation is quickened. Electric stimulation of motor nerves produces an irritability and contracture of muscles supplied by it. A current passing through a sensory nerve produces pain, and a current affecting a mixed nerve produces both. Lastly and most important are the trophic changes. *Nutrition is influenced and tissue metamorphosis is increased.*

General rules for application:

1. Localize carefully the disease.
2. Moisten thoroughly the skin and electrodes, preferably with warm salt water.
3. Cover well all metallic points.
4. The beginning of severe pains is a guide to the strength of current; that having been reached, reduce current to just near that point, and continue treatment.

5. Know the dosage of current, which is to be measured by ampermeter or rheostat.
6. The anode use for the alleviation of pain.
7. Kathode for stimulation.
8. Time of each treatment from 10 to 20 minutes, or as required.
9. The galvanic current to be used only where there is no response to faradic.
10. Where there is no response to either, electricity is of no avail.

Where these few simple rules are carried out you will have a working basis which can be applied to all cases. The idea being to reduce the application of electricity to some scientific basis and there rests the burden which is placed on you as practitioners. We do know that much harm may result from the indiscriminate and unintelligent use of the battery, and if fortunately no harm is done then certainly the instrument is condemned. It should be the aim of the electrician to first diagnose his case and after making a diagnosis to write an electrical prescription either to himself as the therapist or to some one of his selection. This is the point to which we would have you bring Electrotherapeutics, and only by striving toward accuracy with our prescriptions can we hope to obtain results.

In attempting such a large subject within the confines of a small paper, it will be necessary to take it for granted that you are thoroughly acquainted with the elements and principles. And if by mentioning a few of the important conditions we can call your attention to the vastness of applicability and arouse within you the desire to more fully investigate and use this one therapeutic measure, then will the paper have served its purpose. Some of the more important phases of treatment will be mentioned and touched lightly upon.

I. *Neuralgias*.—Among the many persistent and annoying cases you are called upon to treat are the various forms of neuralgia. These may be of the facial nerve in its supra-orbital or infra-orbital branches, or it may be the troublesome Tic Douloureux. These are to be treated by cataphoresis, that property of the electric current by which we are enabled to make a topical application of a medicament to an inflamed nerve. A small cut of filter paper is moistened and on it is laid a required dose of aconitine or cocaine. The paper is then applied over the surface of the nerve. This must be covered again by

the anodal sponge, the cathodal sponge being placed at an indifferent point, preferably the back of the neck. A galvanic current of a few milleampères is passed for a period of five minutes. The strength of the current to be determined by the sensitiveness of the nerve and of the patient. Another favorite method is the anodal faradic brush treatment. This has been quite successful in the hands of some observers.

II. *Local cramps or spasms of muscles.*—This condition we find in the occupation neuroses and in habit choreas, but principally in that painful affection when it affects the large muscles of the leg posteriorly. These muscular conditions subside quickly upon the application of cathodal pole or a roller electrode applied up and down on the affected muscles. The roller electrode is one of general importance, its use being of general application. It is to be considered as next in importance to sponges. Again the indifferent electrode may be applied to the back of the neck.

III. *Paralysis of peripheral nerves.*—Here the faradic current comes into use and is to be applied to the nerve roots, either as a rapidly interrupted or slowly interrupted current. The current is to be raised so that when applied to the muscle it produces a decided contracture. Repeated contraction of the muscles by the slowly interrupted current is to be strongly advised.

IV. *Lesions of the Spinal Cords*—Such as Spinal neuroses and neurasthenia, hysterical spine, "railroad spine," are good indications for the use of Galvanism. The application should be with the cathodal pole applied to neck and the anodal applied to the lumbar region. A current of from four milleampères to eight milleampères is to be passed for a period of ten minutes. The cathodal electrode may be moved up and down whole length of the spine by means of the roller or sponges while the anodal remains on the neck.

As to destructive lesions within the cord, particularly sclerosis of either the lateral or posterior columns, our own experience has not been so gratifying as that of some. It can be said that the effect on the cord itself, if there is any, ought to be ascribed to a betterment of the circulation and nutrition.

In the massage of atrophied muscles resulting from disease within the cord or atrophy of tissues the roller electrode on an interrupted faradic current is to be used. The interruptions should be slow.

V. *Paraesthesia, Anaesthesia, Hyperaesthesia*.—These sensations, as a rule, greatly improve under the gentle stimulation of faradic brush, applied cautiously and persistently.

VI. *Diseases of Female Genito-urinary System*.—This was at one time electricity's greatest stronghold, and has led to more abuse than one can readily imagine. Here again results were not so marvelous as had been anticipated and the treatment was discarded by gynaecologists. Let it be remembered that this form of treatment shows itself best in the good effects it has on inoperable cases of fibroid, where pain, hæmorrhage and increasing size of the tumor are prominent features. *Pain can be relieved, hæmorrhage lessened and growth retarded by judicious use of electrical current.* The cathodal pole is to be placed on the abdomen and the anodal into the uterus. The anodal electrode should be a specially constructed one. Currents of from 30 to 50 milleamperes passed for about five minutes. It is essential to have the patient rest for several hours after the treatment.

By using such low currents we overcome the objection raised by some that cases treated by electricity are not favorable ones for operation, owing to the fact that no dense scar tissue is formed.

In closing permit me to review a few thoughts concerning the reaction of degeneration.

When the normal muscular irritability is disturbed and we have a diminished faradic with an increased galvanic irritability we have the condition known as *reaction of degeneration* or expressed by the formula:

$$RD = DF. \text{ and } IG.$$

It represents in general the cutting off of a muscle or group of muscles from their trophic nuclei, and is of bad prognostic import. As to its prognostic value, generally speaking, if there is no change in the irritability at the end of 12 weeks we can positively predict an unfavorable prognosis.

The reaction of degeneration is found in—

- (a) Disease of anterior horn cells.
- (b) Disease of spinal and cerebral nerve roots. ,
- (c) Disease of peripheral nerve roots.
- (d) Disease of medulla and cranial nerve roots.

EDITORIAL.

WILLIAM H. BIGLER, M. D.

Born June 10, 1840—Died December 10, 1904.

It is with feelings of deepest sorrow and regret that we take up our pen to record the death of our able co-worker and esteemed friend, Dr. William H. Bigler. Called away suddenly, in the midst of an active and useful life, his loss is a heavy blow to his associates and colleagues, and is lamented by all who appreciated his genius and respected his skill and learning.

Professor W. H. Bigler, a son of Bishop David Bigler, D. D., of the Moravian Church, was born June 10, 1840. His boyhood days were spent in New York, where his father was then a pastor. He was graduated from the Moravian College and Seminary at Bethlehem, Pa. He then spent two years in Europe at the Universities of Berlin and Erlangen. Upon his return home he was appointed to a professorship in his *Alma Mater*, which position he held for eight years. He then began the study of medicine and was graduated from the Hahnemann Medical College of Philadelphia in 1871. He immediately entered the Dispensary service and was continuously connected with the College in some capacity until his death.

Such was the versatility of his attainments that upon occasions, where from any cause there was a prolonged absence of a teacher, Dr. Bigler temporarily filled the position with great acceptability. During his earlier years he acquired an enviable reputation in the Department of Ophthalmology and Otology, but never relinquished his hold upon his large general practice.

In 1890 he was appointed Associate Professor of Physiology and in 1891 was elected a full Professor of that branch. Later, upon the resignation of Dr. B. F. Betts, the lectureship of Pædiatrics was added to his chair: in both these departments he

proved the same cheerful, enthusiastic and successful worker that has characterized him in every position to which he has been called.

In 1876 he was one of the editors of the *American Journal of Homœopathic Materia Medica*.

In 1896 he became associated with the editorial staff of the HAHNEMANNIAN MONTHLY and continued upon it until he ceased to work and live. His editorials usually dealing with live and important issues were able, thoughtful, crisp, often witty and when occasion seemed to demand it, sarcastic.

He was the author of Bigler's Syllabus on Physiology, and many articles to societies and journals.

He believed in the benefits to be derived from association with the members of his profession and soon after his graduation became a member of the Homœopathic Medical Society of Philadelphia, and subsequently served as its President for two years. In 1872 he joined the Homœopathic Medical Society of Pennsylvania, and in 1886, as first vice-president, served as its president upon the death of Dr. Cowly, president-elect. In 1876 he joined the American Institute of Homœopathy and has been a member of the senate of seniors since 1901.

He was a member of the Philadelphia Clinical Club since its organization, and was one of the organizers of the Hahnemann College Alumni Association, and an officer of it during most of its existence. In these various medical organizations he was an earnest and persistent worker in all things making for their usefulness and success.

He married the daughter of Dr. Augustus W. Koch, a prominent physician of Philadelphia. There were born to them five children. There survive him the widow, one daughter, Mrs. D. P. Moses, of New York, and one son, Dr. Bernard E. Bigler, now of Colorado Springs.

Death came to him suddenly on December 10, 1904. On the afternoon of that day he attended a special meeting of the Hahnemann College Faculty and was apparently well, happy and in his most genial mood. Upon its adjournment, at 3.30 o'clock, he started down Broad street, and in a few minutes fell to the pavement on Walnut street below Broad; those near ran to his assistance, thinking he had slipped upon the ice but found him already dead.

Professor Bigler was a man of genial disposition, of a broad and liberal education, a versatile and entertaining writer, a

witty and instructive conversationalist, and indefatigable worker and a good and very popular teacher. He will be mourned by numberless friends and patients and be sadly missed by his colleagues and pupils.

CARE NEEDED IN MAKING ESTIMATES.

WE learn from the *American Physician* that a certain College is elaborating a plan by which "each student will have eleven weeks' residence in the institution, and where it is estimated, he will have under his immediate care and observation from 2,000 to 2,500 cases." . . . "It is proposed therefore to have them start in with typhoid fever, pneumonia, or whatever the case may be, and watch it daily through its entire course. They will be divided up into different departments obstetrical, gynecological, medical, etc."

Immediately we thought what an enormous experience this would prove to be. We are afraid, however, that on investigation such an elaborate plan is impossible. Let us make a calculation.

Long years of experience has taught us that the first thorough examination of a patient, if it is done properly, will take half an hour. The average will probably be higher than this, for many cases require clinical laboratory work which will increase the time stated to nearly an hour. But let us for the sake of getting at facts put the figure at half an hour. This means that it will take 1,250 hours for the examination of the 2,500 cases; or 125 days of ten hours each; or if the work is done in eleven weeks, 77 days of over 16 hours each.

It is furthermore stated that the cases will be seen daily. Let us take the average of hospital statistics including both in- and out-patient work, which shows that each patient is seen five times daily. Let us assume that five minutes will prove to be a proper average for observing the after treatment in a satisfactory manner. This means that each one of 2,500 cases will require 20 minutes of after treatment, or 50,000 minutes; or 833 hours; or 83 days of 10 hours each.

In other words, enough work is planned for the student to occupy his attention for 2,083 hours. If he is to get all this work finished in 11 weeks, or 77 days, he will have to work over 27 hours out of each twenty-four.

We have been very liberal in making the above estimates, as we have taken no account of time occupied in surgical operations, dressings, obstetrical cases, time lost in dealing with fractious, uneducated, ignorant and garrulous patients, autopsies, etc.

THE NEW YEAR.

It is not the policy of the HAHNEMANNIAN MONTHLY to devote several pages of valuable space either to self-laudation and felicitation over what it has done in the past, or to the presentation of an array of promises regarding the future. Like the righteous, we are content that our past should be judged by its fruits. As to the future it only need be said, that if earnest effort directed in accordance with years of experience in journalistic work, together with the hearty co-operation of the ablest and most successful men of the homœopathic profession, can accomplish anything, we can assure our readers of their fullest benefits.

As the fleeting years slip by there comes to us as a journal and to you as an individual physician new cares and new responsibilities. Let us remember that as a homœopathic journal, or as a homœopathic physician, we are under obligations to be ever solicitous of the good name, and exert our best efforts to advance the interests of the homœopathic school of medical practice. Let us also remember that the first and most important way of manifesting our realization of these obligations to advance the interest of the homœopathic school is by *loyalty*—loyalty to its principles, loyalty to its organizations, its hospitals, its journals, and loyalty to our brother practitioners.

In conclusion it is our sincere wish that the New Year may be marked by the advancement of medical science, by progress in the homœopathic school and by prosperity for our friends and readers.

THE PRESENT STATUS OF SERUM THERAPY.

THE distinctive feature of medical science in the present age is the recognition of bacteria as a cause of disease, and the attempt to treat infective disease by specific antitoxic or antibacterial serums. As Dr. Herbert Moore ably stated in a recent paper before the Minnesota State Homœopathic Institute, and Dr. R. S. Copeland also pointed out in a paper read before the last session of the American Institute of Homœopathy, the basic principles of serum therapy appear to be in accord with the law of similars. It is, therefore, desirable that we understand the character of the results obtained by sero-therapeutic measures and also their present range of application and limitations.

One of the first steps toward the development of serum therapy was the discovery of the fact that in the presence of microbic infection the cells of the body have the power to produce specific substances which destroy the bacteria and antidote their toxins. These phenomena are supposed to be brought about in the manner suggested by Ehrlich in his "Lateral Chain" theory, recently discussed in the *HAHNEMANNIAN MONTHLY*. In 1890 Behring and Kitasato published the results of their investigation of tetanus. They demonstrated that it was possible by injecting animals with small quantities of the toxins of tetanus to render them immune to the disease; also that if the serum of an immune animal were mixed with an equivalent amount of the poison and injected into a non-immunized animal no symptoms of the disease appeared. These observers, and also Wernicke, later showed that the same phenomena were true in regard to diphtheria. In 1891 Bordet proved that other bodies beside bacteria, if injected into living animals give rise to substances destructive to themselves. Thus, if the blood of an animal of one species be injected into an animal of another species, the serum of the latter develops the property of dissolving the corpuscles of the animal of the former species. Ehrlich showed that animals could be immunized in the same manner against vegetable poisons, such as abrin (from jequirity), ricin (from castor oil) and crotin (from croton oil).

The simplest classification of sero-therapeutic measures is that adopted by Ricketts.

I. *Protective Injections:*

1. Antibacterial vaccination.
2. Prophylactic injections of antitoxic sera.
3. Prophylactic injections of antibacterial sera.

II. *Curative Injections:*

1. Antitoxic sera.
2. Antibacterial sera.

Antibacterial Vaccination.—The most successful example of this method of conferring immunity to bacterial infection is vaccination against small-pox. Pasteur's antirabic vaccination induces active immunity against hydrophobia. Wright's method of vaccination against typhoid fever is a measure of some value. British Army reports from Africa and India show that its use decreased the mortality rate and rendered the disease milder in those persons on whom it had been employed. Quite recently Friedman has reported a method of vaccination against tuberculosis, whereby he claims to have immunized guinea pigs, the most susceptible of all animals, against the most virulent organisms.

Prophylactic Injections of Antitoxic Sera.—The best known of this type of injections are the antitoxines of diphtheria and tetanus. Concerning the efficacy of the former it is unnecessary to speak in detail. The tetanus antitoxin is very effective as a prophylactic, but cannot be expected to *cure* any large proportion of cases in which the disease is already developed. This failure to affect the disease when once established is due to the fact that almost by the time the clinical symptoms can be recognized the toxins have produced profound changes in the cells of the vital centres situated in the medulla. Yersin's serum is effective as a prophylactic against plague, but the protection only lasts fifteen days.

Prophylactic Injections of Antibacterial Sera.—Serums of this type have not, so far, proven of much value. Haffkine's prophylactic against cholera is the only one that has given encouraging results up to the present time.

Curative Injections of Antitoxic Sera.—The most efficient of this type of sera is the diphtheria antitoxin which is curative as well as prophylactic. Calmette's treatment of snake bites by antivenene is very successful in animals and probably so in the human body. Its serious drawback practically is that a serum derived from one species of snake has no neutralizing power over poison derived from another species. Yersin's

plague antitoxin is a remedy of value. A typhoid fever antitoxin has been used by Chantemesse with apparently good results, but there is not yet sufficient data on hand to form a judgment as to its value. Several clinicians have reported favorably concerning the use of the antityphoid extract of Jez. This extract is made by rubbing up in a mortar the brain, spinal cord and spleen of immunized rabbits and extracting the pulp with saline solution and a little alcohol. Its use is still experimental. Both Marmorek and Maragliano have prepared serums which they claim to be of positive value in the treatment of tuberculosis. Their results have not been corroborated by other observers. The pneumonia antitoxin is a complete failure. A serum has been prepared for use in swine plague which undoubtedly has a specific action both in preventing and curing the disease.

Curative Injections of Antibacterial Sera.—Several serums of this type have been prepared and when used in advance of the infection are effective; but as now constituted they have little power over established infections. Aside from this, all antibacterial serums appear to keep badly, losing their bacteriolytic power quickly. Marmorek's antistreptococcic serum is the best known example of this class. The use of this preparation in sepsis on the whole has been disappointing. Where the septic process is due to a pure streptococcic infection and the serum is used early favorable results are obtained.

Our time does not permit us entering into a discussion of the use of serums as a means of diagnosis. Suffice it to say in passing that they have proven of great assistance to clinicians in the diagnosis of typhoid fever, malta fever, dysentery, tuberculosis and anthrax. From this cursory review of serum therapy we see that the results obtained have been good, bad and indifferent. There are many objections both theoretical and practical to be overcome before serum treatment can be employed more extensively in the treatment of the sick. Enough has been accomplished, however, to warrant us in hoping that further developments of this mode of treatment will bring to light remedies which will serve as protection against, and materially reduce the mortality of, bacterial diseases.

GLEANINGS.

CALOMEL AS A DIURETIC.—Lesignoli (*Il Policlinico* No. 67, 1904,) reports a careful study of four cases, three of which were of mitral insufficiency and the other one of cardiac hypertrophy due to rickets. He concludes that calomel in doses of 0.15 gm. ($2\frac{1}{2}$ grs.) three or four times a day will increase the urine passed within from two to nine days. It is well to combine with the calomel a minute dose of deodorized tincture of opium in order to diminish the chance of intestinal irritation. Salivation must be guarded against. The advantage of calomel is that it will succeed when many other diuretics have failed, and produces a mild, steady and sustained increase in the amount of urine which may be maintained for months.—*Am. Med.*, Dec. 17, 1904.

The experience of the writer enables him to endorse all that has been claimed for calomel as a diuretic. It has repeatedly succeeded after the failure of other diuretics, and, conversely, other diuretics rarely act in cases in which calomel has failed. While the dosage given above may be preferred by many, the writer has seen results not less satisfactory follow the administration of one-grain tablet triturates of *mercurius dulcis* ix every two hours. The appearance of diuresis, usually at the end of about five days, has been made the signal for discontinuance of the drug, but its effects often have persisted for a long time.

F. MORTIMER LAWRENCE, M. D.

ACCURACY IN MEDICAL WORK.—In a recent address, Cabot expresses the opinion that the use of exact methods in diagnosis, the use of instruments of precision, and the keeping of full and accurate records will in future times be regarded as the most striking characteristics of the progress of medicine in the last fifty years. As the result of these tendencies toward more accurate methods, certain changes have occurred both in medicine and in physicians. Exact methods have led to the abandonment of many of the loosely applied terms which uneducated men have so long used as a cloak to ignorance. The gradual disuse of the term "diathesis" to describe certain obscure symptoms, the disappearance of the word "bilious" from our vocabulary, the absence from modern diagnosis of such diseases as congestion of the brain or liver, and the reclassification of the multitudinous affections formerly grouped under the general head of rheumatism, have all been due to modern methods. The dividing line between knowledge and ignorance has been sharpened and we are able to see more clearly where our future work must be concentrated. In physicians themselves habits of mind have been built up which are distinctly antagonistic to habits of deception. The hazy condition of mind in the physician who has made an inaccurate or slovenly observation leads him into a habit of drawing on sources other than facts in order to clear away the haze when he comes to state his results. On the other hand, the habit of accurate

observation leads him to lean on fact, to analyze and deduce from fact, and to avoid embellishment and unwarranted assertion. It is lying for a physician to give expression to an inaccuracy. The tendency to separate the laboratory from the clinical man is to be deplored. A complete view of a case must include both clinical and laboratory facts, and it should be the aim not only to train the student to do his own laboratory work, but to intelligently interpret his findings.—*California State Jour. of Med.*, Dec., 1904, quoted editorially in *Jour. A. M. A.*, Dec. 17, 1904.

F. MORTIMER LAWRENCE, M. D.

A STUDY OF ULCER OF THE STOMACH AND DUODENUM.—HOWARD.—*Conclusions*:

1. Gastric ulcer is rare in the Johns Hopkins Hospital as compared with cancer. The respective incidences being 1 to 225 and 1 to 56 general admissions.

2. Gastric ulcer in our series was as common in the male as in the female. In the male the percentage of greatest frequency was between the ages of 40 and 50—a decade later than usual.

3. Ulcer was in our cases relatively more frequent in the colored race and among Germans.

4. Vomiting occurred in 85.3 per cent.; pain in 82.9 per cent., and hematemesis in 75.6 per cent.

5. Great loss of weight may be present; thus in 36 cases there was a loss of more than ten pounds, and in 9 of forty pounds or more.

6. Our statistics would indicate that hyperchlorhydria is not so constant as usually maintained; it was present in only 17.6 per cent. of our cases.

7. The blood picture is one of chloroanemia as seen from the average count hemoglobin 58 per cent. red blood corpuscles, 4,071,000; white blood corpuscles 7,500 per c. mm.

8. Hemorrhage was the cause of death in 8.5 per cent. of the total number of cases, and in 29.5 per cent. of the fatal cases.

9. Perforation is rare (3 cases or 3.6 per cent. of our series). General peritonitis occurred in but one instance (1-2 per cent.).

10. Ulcer carcinomatous is rare—at least 4-8 per cent. of our series.

11. Operation is indicated in all cases, with perforation or perigastric adhesions, and in cases of copious or recurring hemorrhage, when medical means have failed after a fair trial.

12. The mortality of the series was 29.3 per cent. In the cases, however, who received treatment there was a mortality of only 18.8 per cent.; in those receiving medical treatment alone 8.6 per cent.—*The American Journal of the Medical Science*, December, 1904.

WILLIAM F. BAKER, A. M., M. D.

In operations where the results are negative as to finding of stone, a valuable suggestion is put forth in exercising part of kidney for microscopic examination.—*Medical News*, November 26, 1904.

WILLIAM F. BAKER, A. M., M. D.

DIAGNOSIS AND OPERATIVE TREATMENT OF STONE IN THE KIDNEY.—*Ranschoff*.—In discussing the above title the writer divides the symptoms into

two groups, the one due to the passage of the stone through the ureter, resulting in the attack of acute pain or "renal colic," and the other the symptoms referable to the condition within the kidney or the "nephrolithiasis." The writer believes the stress laid on the "colic" is greatly overestimated in making a diagnosis, for many stones are found where there has been no definite colic. Many other conditions are there also which would produce symptoms similar to stone, as for instance a twist of the ureter. The attack resulting from a twist cannot be differentiated.

The examination of patients suffering from stone is quite important, and the writer outlines a method of examination quite in keeping with our constantly practice one, viz: The patient is made to stoop over, resting his hands on a chair. With extended fingers placed over the lateral costal-iliac interval, equal pressure is made with thumbs along the lower border of the last rib from end to end. This method will bring out any tenderness due to stone. Another important feature of diagnosis is the urinary examination. Here changes are frequent and characteristic. Almost every specimen will contain numerous red cells. Microscopically the urine is normal until a pyelitis has developed, then the pressure of pus is quite apparent.

The X-ray plays a necessary important part in diagnosis of all stones, but while it is open to an occasional error, it is quite a satisfactory means of diagnosis.

Indications for Operation: Among surgeons in general the cry is for immediate operation, but better indications would be persistent pain, anuria, either permanent or intermittent. The operations suggested are nephrotomy and in rare cases nephrectomy.

WILLIAM F. BAKER, A. M., M. D.

X-RAYS IN THE DIAGNOSIS OF PULMONARY TUBERCULOSIS.—Green points out that if physicians will remember that a diagnosis of any condition can not be made by one single method of examination, but that advantage must be taken of all other aids, particularly history, symptoms and physical signs, The X-ray will be found as valuable in the diagnosis of early tubercular deposit in the lungs as the opthalmoscope is in the diagnosis of many diseases. Apart from ethical reasons, he says that it is very important that this work should remain in the hands of medical men, and not be given over to chemists and photographers. The screen examination, to which he attaches considerable importance, is carried out with the patient lying on a table with vellum top and with a tube placed in a box beneath, which is movable in both directions, or else standing up about eighteen inches from the tube, with the surface of the anode parallel to the greatest transverse diameter of the chest. It is absolutely necessary for the patient to be stripped to the waist and the room kept at a suitable temperature; the light in the tube must be under perfect control, so that the penetration of the tissues may be buried at will. The first point to notice is the position and movements of the diaphragm on the two sides. The patient should then be asked to take a deep inspiration, followed by a full expiatory movement. The excursion of the diaphragm is again measured. The patient must then be examined with the screen on the chest and the tube at the back, to ascertain the height and movements of the diaphragm as seen from the front.

Other conditions which can be noted in the screen examination are the slope of the ribs and the width of the intercostal spaces, the position and shape of the heart, shadows and opacities in the lung, and the effect of deep inspiratory movements on these—a very important point. In a few cases small opacities can be seen in the mediastrium, suggestive of enlarged and perhaps calcareous glands. Unilateral limitation of movements of the diaphragm is the earliest sign of pulmonary tuberculosis, and in no case which Green examined, where this sign was noted (in the absence of a history of pleurisy) has he failed to find deposits in the lungs, either then or later. Furthermore, if the history and symptoms are taken into consideration, the movements of the diaphragm may be taken as a measure of the activity of the disease.

Fluid in the pleural cavities can also be detected easily by a screen examination. The shadow cast by a purulent effusion is much more dense than that of a serous effusion, obscuring the shadow of the ribs, which can be seen through a serous effusion. It is also possible to say whether air is present in addition to fluid or not; in the former case the upper level of the shadow in the erect position is horizontal, while in the latter, under the same conditions, the shadow has the form of a concavity, the sides of which are prolonged upward for a considerable distance. Green uses a 10-inch coil, so arranged that when necessary to go to the patient's house, it can be worked by one 6-volt accumulator, and the Charpentier Gaeffe interrupter, which will admit a variation of current of from 2 to 10 amperes, and at the same time permit of the use of a 230-volt current through a Nodal jet interpreter in the consulting room. In the former case the exposure necessary to give a good skiagram of an adult thorax varies from two to three minutes, whereas in the latter thirty to sixty seconds is ample to give good definition, the tube being placed from twenty to twenty-four inches from the plate, the anode being on the level with the third or fourth rib. In some cases he uses a separate plate for each lung; in others only one plate for both lungs. The back to plate method is used in every case. Sometimes he exposes the plate while the patient holds his breath, after a deep inspiration, cutting off the light as soon as the second inspiration is necessary. This means three or four periods of exposure to bring up the requisite time. Rapid plates, which will stand long development without fogging are essential. Where cavities are suspected, it is important to take one skiagram and then, after the patient has coughed and expectorated, to expose another plate. In this way the cavities, being emptied, will be seen as light areas in an opacity; in the first skiagram the opacity would be more homogeneous.—*Dublin Medical Journal of Medical Science*, October 11, 1904.

WILLIAM F. BAKER, A. M., M. D.

CAISSON DISEASE.—ALDNEH.—The writer, having investigated over 500 cases of compressed air illness, gives the following symptomatology: While the symptoms may at times be delayed for a period of time after "coming out," every grade may be met with from transient attacks to the convulsive, comatose or death. The pain is intense, with remissions and exacerbations, and is situated in the stomach and about the larger joints. The severity of pain and suffering caused the patient to bend double, hence the term so commonly used among the caisson workers, "bends."

The neuralgic cases last from a few minutes to several days. The resulting paralyses vary as to time for clearing up, and some even remain as permanent conditions. Others perish slowly from exhaustion. In very severe cases, death is quick.

The symptoms usually complained of are headache, vertigo, double vision, incoherent speech, unconsciousness and convulsions. The paralysis may affect one or more extremities. There may be lost tactile sensation and power of motion, while the annoying pain may last. The exciting causes are (a) degree of pressure; (b) length of time in caisson; (c) rapidity of ascension; (d) insufficient time from leaving and returning; (e) lack of ventilation; (f) exposure to damp cold; (g) active muscular exercise after leaving. The writer feels that if sufficient care is exercised, there is very little need for this malady.—*Medical News*, November 26, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE DIAGNOSTIC VALUE OF LEUCOCYTOSIS.—McCASKY.—This subject is of so much importance as to require for its investigation a routine blood count, particularly of the white cells. While a single leucocyte count may be found entirely unsatisfactory, a repeated investigation may give positive results, particularly if they be made under different conditions. An increase in the blood beyond 10,000 or 12,000 leukocytes indicates degrees of intoxication. Whether it indicates suppuration or not is a question as yet undecided. The leucocytes indicating suppuration and allied processes are of the neutrophile type, with the eosinophile forms indicate, among other things, cutaneous and parasitic diseases in the intestine. A differential count, of course, is the only method to determine the type of cell, which has been the increasing one.

In diagnosis of malignant diseases a leucocytosis is of very subordinate value, and when present is probably not due to malignant disease, but to some co-existing condition. *The American Journal of the Medical Sciences*, December, 1904.

WILLIAM F. BAKER, A. M., M. D.

A VISCERAL EQUIVALENT IN AN EPILEPTIC (ACUTE OEDEMA OF THE LUNGS).—Dr. Alessi records the case of a male of fifty-five years, who for a long time had been subject to epilepsy. He was admitted to the asylum at Pisa, Italy, during an attack of epileptic mania. Four days after his admission, when his mental condition had already greatly improved, he was seized with convulsions and the following evening he was suddenly attacked with dyspnoea, accompanied by cyanosis, a sensation of suffocation, cough, and expectoration of an abundant, frothy and reddish liquid. There was slight dulness on percussion, absence of the respiratory murmur on auscultation, while both lungs seemed to be filled with rales. The patient remained in this state about twenty-four hours; then the dyspnoea decreased, so that two days later nothing abnormal was to be noted on auscultation. Nevertheless he still continued to be delirious and violently agitated. After several days he became mentally normal and although remembering that he had been seriously ill he could not recall the details of his illness. After that a year passed without similar symptoms, although he

often had epileptic attacks. Dr. Alessi regards this attack of oedema of the lungs as a true visceral equivalent of his disease. It came on suddenly, without apparent cause, and it was followed by a mental condition similar to that observed after a classic attack of epilepsy. In his antecedents it was noted that he had suffered from pneumonia. Amongst the other visceral equivalents there have been recorded various respiratory troubles as attacks of asthma, spasm of the glottis, etc., but none of oedema of the lungs.—*La Clínica Moderna* No. 6, 1904.

FRANK H. PRITCHARD, M. D.

THE TREATMENT OF ENURESIS IN CHILDHOOD.—In the course of a report on 90 cases of enuresis treated in the pediatric department of the University Hospital, Philadelphia, Ostheimer and Levi outline the treatment there employed. Dietetic errors were first corrected: tea, coffee, fresh bread, cake and fried things were absolutely forbidden, nothing was allowed between meals except milk, no liquids were allowed after supper and the fluid taken at that meal was limited to one cupful. Cold sponge baths of two minutes duration, followed by rubbing the entire body with a Turkish towel, were ordered daily on arising; and associated conditions, such as pharyngeal or gastrointestinal catarrh, eczema, worms, etc., were given special attention. In a few cases, a folded towel was fastened on the child's back to prevent sleeping thereon, and in some cases the foot of the bed was elevated. If the urine was hyperacid, potassium citrate was given. In all the boys the foreskin was stripped back regularly and adhesions freed, and when phimosis existed circumcision was advised. In no case was vesical calculus discovered. Tincture of belladonna, gtt. iij. t.i.d. was first prescribed, the dose being increased one drop a day. If ten or fifteen drop doses failed, aromatic tincture of rhus was tried, increasing gradually up to 30 minims a day. If this also failed, as it usually did, a solution containing 1-240 gr. of atropin and 1-480 gr. of strychnin to the drop was given, beginning at one drop a day and increasing by one drop each day until enuresis ceased or strychnia symptoms appeared. Electricity was tried in 13 cases, with but one success. Of the entire 90 cases, 67 recovered, 37 under belladonna, 22 under the atropin-strychnin mixture, 2 under diet and hygiene alone, 1 under potassium citrate, 1 under rhus, 1 after circumcision, and in two after potassium bromide had been added to their medicine.—*Jour. A. M. A.*, Dec. 17, 1904.

F. MORTIMER LAWRENCE, M. D.

A NEW TREATMENT OF WHOOPING COUGH.—THE ELASTIC ABDOMINAL BELT.—Kilmer (New York) records 18 cases of whooping cough treated by means of an abdominal belt. A stockinette band is placed as is that applied by orthopædists before applying a plaster jacket. This band extends from the axillæ to the pubes and fits the baby snugly, two muslin shoulder straps preventing its slipping down. On this stockinette band a single width of silk elastic bandage is sewn, extending entirely around the body and covering the abdomen. If the child is under 5 years of age, one width will suffice; but older children may require two widths to entirely cover the abdomen. This elastic bandage is pinned in place while slightly on the stretch and is then sewn to the underlying band around its entire edge. The lower

projecting portion of the stockinette band should be pinned to the lower diaper or clothing so as to keep the elastic belt smooth.

Kilmer has used this belt with great success to control the obstinate vomiting of pertussis and records in detail his experience. Briefly summarized, his results were as follows:

1. Out of 18 cases there have been but 6 failures to benefit cough.

2. Out of 18 cases there has been but one failure to benefit vomiting.

Therefore, positive good effect on coughing is seen in 66 per cent. of cases in series, and positive good effect on vomiting is seen in 94 per cent. of cases in series. The author concludes by saying that a method for the treatment of whooping cough which will reduce the total number of vomiting spells (as was done in this series of cases) from 3,951 a week to 463 a week, thus showing a reduction of 89 per cent. in the vomiting, certainly should be given a fair and impartial trial.—*Jour. A. M. A.*, Dec. 10, 1904.

F. MORTIMER LAWRENCE, M. D.

THE TREATMENT OF HEART FAILURE IN PNEUMONIA.—Cohen (Philadelphia) suggests that drugs be employed with care and discretion to antagonize the results of the toxemia on the cardiovascular apparatus. Remedies are of two classes—those which support the heart and vessels and those used in emergencies. Digitalis, of which an efficient preparation must be obtained, may be given as soon as there are signs of hepatization; before this, it is contraindicated, as aconite or veratrum viride should be used. The dose, the frequency and persistence of its use, will depend on individual conditions. It has the advantage of raising peripheral vascular tone as well as increasing the force and diminishing the rate of the heart. Often very large doses have to be given to obtain the physiological effect. The infusion, if it can be tolerated by the stomach, is usually the best form, for the sake of the diuretic effect. It can be strengthened by adding the tincture, if necessary. Four hour intervals are usually appropriate. Barium chloride (in doses of about $\frac{1}{8}$ grain every 4 or 6 hours) and atropin (1-200 grain every 2, 4 or 6 hours) are useful, more particularly for effect on the peripheral vessels. In the bronchopneumonia of children the alternate use of atropin and digitalin hypodermically is often of signal service. Sometimes a combination of atropin and camphor in small dose—1-2000 grain of atropin and $\frac{1}{8}$ grain of camphor—may be given at short intervals (every half hour) with better effect than larger doses further apart. Strychnin is an extremely useful drug to maintain general neurocardiovascular tone, but is also extremely apt to be abused. It should be given alone when there is no special indication for any of the cardiac and vascular tonics mentioned, and usually should be continued in conjunction when the other drugs are indicated. Small, comparatively frequent doses are needed, the exact intervals depending on special conditions. For this reason the drug should never be put into a mixture, but is to be kept separate in the form of tablet triturates or pellets. The usual dose of strychnin arseniate is $\frac{1}{2}$ milligram (1-128 grain) every hour for ten hours daily. For prompt emergency effect the dose may be from 1-40 to 1-10 grain hypodermatically.

Usually, however, strychnin is not the best drug for collapse. Three more potent agents are at our service: suprarenalin, camphor and musk. Suprarenalin may be given on the tongue or injected. Its effect is quick and

transient. The author uses triturations containing 1-20 grain for lingual administration. Such a tablet may be given every 10 minutes if needed; as a rule, one every half hour to two hours suffices. Camphor may be injected in a 10 per cent. solution in sterilized olive oil or in ether. Exact dosage is unnecessary; about a syringeful, 20 to 30 minims, can be used. The effect is prompt and usually lasts for some hours. Five or ten drops tincture of musk given hypodermatically exert a powerful influence in overcoming the tendency to cardiac collapse, and the action of musk is even more sustained than that of camphor. Much of the musk sold in the shops is inert. When cardiac collapse is anticipated, it is well to administer five or ten drops of musk by mouth two or three times a day.—*Jour. A. M. A.*, Dec. 10, 1904.

F. MORTIMER LAWRENCE, M. D.

THE NECESSITY OF IMMEDIATE TREATMENT OF AMBLYOPIA FROM LOSS OF BLOOD.—Dr. Terson, of Paris, insists on the danger of definite blindness following amblyopia from loss of blood. This fact has been known to ophthalmologists, but general practitioners do not seem to be aware of it. In several articles he has emphasized the importance of immediate and energetic treatment from the very first moment when the patient complains of amblyopia, when he would inject an abundance of normal salt solution. He related a case where a woman in confinement after artificial delivery, which was accompanied by a profuse hemorrhage, with fainting. Recovering consciousness she complained of not being able to see, her vision being reduced to mere perception of the light of a lamp. Four hundred c. c. of salt solution were injected and the following day her vision was normal. It is quite probable that by increasing the blood-pressure and washing out the blood certain patients are prevented from becoming blind from atrophy of the optic nerve.—*Journal Des Practiciens No. 35, Annee XVII.*

FRANK H. PRITCHARD, M. D.

THRUSH IN ADULTS.—Dr. Srebny, touching on the frequency of this disease in children, points out its rarity in adults except in severe chronic diseases which run their course with cachexia as cancer, tuberculosis and diabetes. In a very few cases of acute febrile diseases he has observed it to complicate, as well as in a few instances where the patient was wholly well.—*Berliner Klinische Wochenschrift*, No. 28, 1904.

FRANK H. PRITCHARD, M. D.

SCOPOLAMINE OR HYOSCIN IN TREMOR.—Prof. Robin, in Paris, recommends hyoscin very highly in the treatment of the symptom, tremor. He has had excellent results in the management of the trembling of hysteria, old age, and paralysis agitans. The remedy being very toxic one should be very careful in employing it. He uses the following solution: bromhydrate of hyoscin, 5-10 mgm. distilled water, 1 gm. One may commence by injecting one-quarter of a syringeful. One may gradually increase the dose until one gives a half, three-quarters—one or even one and a half syringefuls—7-10 mgm. of hyoscin. By the mouth a greater dose may be given; a mgm. may be divided into four doses to be taken at intervals of one and a half hours. It may be continued for three to four hours.

Signs of overdosing easily appear. They are vertigo, roaring in the ears,

giddiness, somnolence, dryness of the mouth, and dilatation of the pupils. Though not serious in themselves, they announce that the limits of safety have been reached. At times a single injection may be sufficient to quiet the tremor; at other times several may be necessary. A period of sedation of several days will follow, after which the remedy may be commenced again if the tremor reappear. At the same time adrenalin may be given or the bromide of gold, to continue the action of the hyoscin: bromide of gold, 0.05, distilled water, 500. A soup-spoonful morning and evening. Besides acting on the tremor the hyoscin has a remarkable action on pain. In three patients affected with lead colic he was able to control the attacks of pain by injecting two-tenths of a mgm. into the abdominal walls. One of these was suffering from excessive gastric secretion and the other, an old syphilitic, from gastric crises from an abuse of mercury.—*Journal Des Practiciens*, No. 35, *Année XVII*.

FRANK H. PRITCHARD, M. D.

TWO CASES OF ICTUS LARYNGIS.—Dr. Mort reports two cases of this peculiar disease in men who were addicted to alcohol and tobacco. They would be subject to seizures of violent tickling in the larynx, with spasmodic cough, which would finally end in unconsciousness. It was to be distinguished from the so-called laryngeal vertigo, which begins in the same manner, but which does not go on to unconsciousness, but which ends in a sensation of severe vertigo. In the pathogenesis of this condition certain constitutional diseases play a part, and in these two cases quite advanced degenerative processes, both of the central and peripheral blood-vessels were at the bottom of the attacks.—*Berliner Klinische Wochenschrift*, No. 28, 1904.

FRANK H. PRITCHARD, M. D.

RECENT EXPERIENCE IN THE TREATMENT OF PERNICIOUS ANEMIA.—Prof. Grawitz, of Greifswald, Germany, asserts that in the past by regarding pernicious anemia as a disease of the blood itself or of the blood-forming organs, we have not gained anything helpful as to treatment. According to Grawitz, the primary lesion does not lie in the blood nor the marrow of the bones, but there is a secondary degeneration of the blood-corpuscles, with a degenerative activity of the bone-marrow, as a consequence of a form of poisoning. In rare cases the poison may be introduced from without, as for example, lead, morphine, carbonic oxide, arsenic, etc., but it is most frequently formed in the intestinal canal from faulty splitting up of the albumen-molecule and the formation of toxins from microbic action. Chemically, this can not be demonstrated, but empirically it is possible. The enterogenous origin of pernicious anemia has been hinted at before, but therapeutically nothing has previously been concluded. The method of treatment formerly employed, rest, nutritious diet and arsenic are insufficient. The results seemingly favorable which are obtained are merely remissions, not cures. Grawitz communicates five cases treated by him during 1903. He kept them chiefly on a vegetable diet, in the form of purees as of potatoes, spinach and rice. To counteract any bacterial activity the stomach is washed out daily, at first, at least, with a tepid solution of salt and water, and the patient is instructed to drink freely of lemonade. The requisite animal albuminoids are given for some time, per rectum. The

intestine is washed out with a solution of salt and water or peppermint water and two nutritive enemata of a pint of milk, with oat-meal soup, sugar, eggs, plasmon, etc., are given daily. The various remedies as arsenic, are not used at all or only after decided improvement. In all his cases this method of treatment brought about not merely a decided, but an astonishing improvement in the constitution of the blood, and the grave general symptoms: the hemorrhages, oedema, fever, asthenia, albuminuria. Three of his cases were discharged as cured, one with chronic hemorrhage from a gastric ulcer as a cause, much improved. In the fifth the blood became nearly normal when an aggravation set in and some weeks after, death followed. The necropsy revealed death to be due to an acute tuberculous peritonitis and explained the contradiction in the favorable state of the blood and the increasing cachexia.

On account of his results and previous experience he thinks himself justified in regarding pernicious anemia as of intestinal origin, for a rational treatment of the gastro-intestinal canal has demonstrated to be sufficient to cause the severe symptom-complex and all the histological changes in the blood-corpuscles to disappear. Hence the question of the future will be how many of these cases have this origin, for that not all of them do, is clear. However, a great number of them have an intestinal origin, and in doubtful cases, where the etiology is not clear, this method of management should be tried and no time lost with doubtful remedies.

The wholly normal state of the blood is evidence that the bone-marrow functionates normally; hence the lymphoid degeneration of the marrow must have been restored to the normal, and the deposits of fatty tissue among the fibres of the heart-muscle must also have been absorbed, for all of his cases presented cardiac insufficiency. In two of his cases the blood had remained natural for seven months, in one case, and nine in the other; and in order to demonstrate that these are actual cures and not remissions he inquired with regard to two other cases which he had treated four and five years before, respectively, and they were reported to be well and their blood-findings normal. These were two serious cases. In one case there remained a lack of hydrochloric acid now, as well as during his illness. He admits that these patients easily get relapses, but that is not to be wondered at, on account of the abnormal state of their digestive tracts. He regards an absence of hydrochloric acid of no consequence, for the intestine can digest albumenoids. It acts as an antiseptic, but citric acid, with small doses of hydrochloric acid, internally, will take its place. As to treatment he holds that it is a fatal mistake to think that the disease is due to a lack of albumenoids, for an excessive feeding with these foods by the mouth, is directly contraindicated, for it only increases the production of toxic substances. No one need fear that it will harm a weak patient to wash out the stomach; the stomach tube may be introduced while the patient is half reclining. He usually feels better afterwards.—*Hospitalstidende* No. 33, 1904.

FRANK H. PRITCHARD, M. D.

DISINFECTION OF THE HANDS.—Dr. Schaeffer has made a number of investigations of this subject and asserts that this question has too long been treated from a bactericidal or antiseptic standpoint, while in reality it is

a mechanical one. The results of his investigations was that alcohol is equal to the strongest disinfectant. Though unable, like other disinfectants, to kill spores, yet on account of the short time that the hands have to be antiseptic, it is of no particular consequence. It has the advantage of dissolving fatty substances and epithelium, thus enabling one to remove those bacteria which may be removed from the hands, and with the exception of tincture of green soap, it is therefore superior to all other antiseptics. By hardening and shriveling the hands it reduces the remaining bacteria to a minimum; therefore, practically, it is better than any other antiseptic. He concludes that the hot-water and alcohol-method of disinfecting the hands is the best and safest method of all.—*Berliner Klinische Wochenschrift* No. 28, 1904.

FRANK H. PRITCHARD, M. D.

A RARE CASE OF SYPHILITIC INFECTION.—Dr. N. Romanovsky reports a case of chancre of the nose, an infrequent localization of the initial lesion of this disease, in fact one of the rarest places to be infected. The majority of cases usually affect the mucous membrane or the *alæ nasi*. The case was that of a workman who, in the course of a quarrel with a fellow, received a scratch at the root of his nose, which bled slightly. The wound scabbed over and seemed to have healed, when at the end of three weeks he noticed that it was the seat of an ulcer. At first limited in extent, it developed rapidly and showed no tendency to cicatrize. When he consulted Dr. R. the ulcer had persisted for a month and a half, was somewhat towards the left of the root of the nose, and of the size of a quarter of a dollar. Its borders were elevated, hyperemic and somewhat hardened. The auricular glands of the left side were greatly enlarged and hardened, while the submaxillary glands of the same side were so increased in size as to form a mass which at once attracted attention; finally, the supraclavicular and the cervical glands were also somewhat hypertrophied. The appearance of the ulcer, the enlargement of the lymph-glands and the history of the case pointed towards a syphilitic lesion. One might also have thought of an epithelioma, but the youth of the patient, the thick and infiltrated margins of the wound, the presence of a purulent secretion, and the slightly granular appearance of the wound were in favor of the former diagnosis. Further, the course of the case also upheld this diagnosis. Three weeks after the first examination the patient presented upon his flanks as well as on the lateral portions of his thorax, a typical roseola, while at the same time a specific tonsillitis appeared with an ulcerated papule on the left tonsil, and mucous patches on the pillars of the fauces of the same side. Then all the lymph-glands of the body were affected. Palpation revealed a characteristic pleiade inguinale. Daily injections of a 1% solution of benzoate of mercury, with local application of a 20% solution of the nitrate of silver to the fauces soon controlled all the morbid phenomena. The roseola disappeared after ten injections; the mucous patches after the twentieth, and the chancre soon wholly cicatrized.—*La Semaine Medicale* No. 135, 1904.

FRANK H. PRITCHARD, M. D.

SYPHILITIC MENINGITIS RAPIDLY CURED BY HYPODERMATIC INJECTIONS OF THE BENZOATE OF MERCURY.—Drs. Galliard and d'Oelsnitz, of Paris, report-

ed before a recent meeting of the Société Médicale des Hôpitaux, the case of a young woman of twenty-two years, whose roseola dated back to August, 1902, and who was affected with meningitis on the thirtieth of April, 1903. Lumbar puncture yielded a turbid dirty liquid, containing numerous lymphocytes. Under the influence of daily injections of two cgm. of benzoate of mercury on the fourth day the contractures yielded and the case went on to a complete recovery. The injections, which were made into the substance of the muscle, were continued for some time.—*Journal des Praticiens* No. 25, Année XVII.

FRANK H. PRITCHARD, M. D.

MELANOSIS AND KERATOSIS ARSENICALIS.—Dr. Ludvig Nielsen reported to the Danish Dermatological Society the case of a young man of thirty-five who had suffered from lichen ruber planus, and who for a year and a half, with an interruption of two months, had otherwise steadily taken Fowler's solution, ten drops three times a day. His skin disease being obstinate he took the remedy for some four or five months longer. After he had employed the remedy for about six months the skin began to be discolored, but the attending physician knew nothing of it, as the patient did not mention this fact. About the same time a keratosis of the hands and feet commenced to be noticeable, with dryness of the palms and a hyperidrosis of the soles of the feet. Chronic conjunctivitis with epiphora developed after a few months use of arsenic. Otherwise there were no other symptoms except a loss of weight, about ten pounds during the year and a half, and less appetite. During discontinuance of the remedy the keratosis and conjunctivitis improved, but the melanosis remained the same and became aggravated when the solution was taken up again.

At present he is fairly well nourished, but is easily tired and with but little appetite, otherwise his functions are in order. No symptoms of the nervous system. There is a diffuse dark brown pigmentation of the whole trunk and neck, most pronounced here and in the axillary folds, while on the limbs it decreases towards the periphery. The skin of the face, which was also quite dark and spotted here and there with irregular and darker blotches. Elsewhere the remainder of the skin is covered with closely placed spots, varying from the size of the head of a pin to a hempseed, in size and of the color of the normal skin. He easily sweats, especially at night during sleep. The skin over the volæ was somewhat hyperemic, dry, slightly thickened and uneven. That over the soles is reddish, blotchy, moist with irregular thickening. No affection of the nails. The conjunctivæ are somewhat hyperemic, with excessive secretion of tears. There is no lichen ruber, but signs of a tendency to the disease of the mucous membrane of the mouth and tongue. Urine acid, without albumen or sugar.

The reporter publishes this case in order to energetically call attention to the misuse of this remedy, either from its being given too long, in too large doses, to be left uncontrolled in the patient's hands or otherwise. The drug is a dangerous one to hand over to a patient to use at will, and in a much shorter time than in this, it may cause serious disease of the skin or nervous system, which is much more difficult to cure than the original affection itself.—*Hospitalstidender* No. 32, 1904.

FRANK H. PRITCHARD, M. D.

A CASE OF TRUE DIABETIC COMA CURED BY INTERNAL ADMINISTRATION OF LARGE DOSES OF BICARBONATE OF SODA.—Dr. Karl Grube, of Neuenahr, Germany, observed a case of diabetic coma in a male of forty-nine years who had had the disease for two years, and who had been under treatment by the writer for a month, when he became comatose. The patient, greatly emaciated, presented sugar in his urine, an abundance of acetone and diacetic acid, as well as oxybutyric acid. He was quite unconscious, reacted only on calling loud into his ear; his tongue was dry and hard, while his breath smelled strongly of acetone. He passed his urine twice involuntarily. The breathing was characteristic, the pulse rapid and small, the temperature normal and the reflexes present. As he still could swallow, he was ordered given five gms. of sodium bicarbonate in a half a wineglass full of water every hour. This was continued for forty-eight hours, while he received two quarts of milk per diem. Already that evening his coma had lessened and the respiration was more rapid; the following morning the breathing was normal, and by afternoon the stupor had disappeared. His tongue was moist, his breath smelled but little of acetone and towards evening he passed spontaneously very copious, foul-smelling and dark-colored stool. On the third day he was quite cheerful, though weak and indescribably tired, but without any other cause for complaint. Castor oil produced several similar stools. The patient so far recovered that a month later he was able to undertake a journey to his home in England, where he arrived without any bad effect from the trip.—*Berliner Klinische Wochenschrift* No. 34, 1904.

(Dr. Grube is accustomed to employ a mixture of sodium bicarbonate, calcium phosphate and calcium carbonate, in powder form, a teaspoonful of this mixture three times a day. He obtained this hint from a layman whose diabetes was influenced for the better by taking three times a day a teaspoonful of powdered egg shells.) FRANK H. PRITCHARD, M. D.

A CURE OF CHRONIC NEPHRITIS IN A CHILD FOLLOWING RENAL DECAPSULATION.—Augustus Caille reports the case of a girl, four and one-half years old, operated for chronic nephritis, by Edebohls, with cure up to the present time (two and one-half years later). The history was as follows:

Measles at 2 years. Two weeks later was severely scalded on back and legs. Several weeks after that general anasarca and ascites developed. These symptoms lasted four weeks and were followed by apparent recovery, but a month later there was a recurrence of œdema. During a third attack in November, 1900, she was admitted to the N. Y. Post-Graduate Hospital, from which she recovered partially. In April, 1901, was readmitted to the hospital with all the symptoms of chronic paranchy matoirs nephritis, viz: Scanty, dark, albuminous urine; all forms of casts and renal emements; blood and pus; eyes puffy; ascitus. She improved under treatment, but in February, 1902, was again at the hospital with general anasarca; enlargement of the heart, albuminuria, etc.

Both kidneys were decapsulated February 19th, 1902, under nitrous oxide and ether. The urine gradually increased from 700 c.c. to 1000 c.c., and albumin and casts have disappeared from the urine. Inspection verified the diagnosis; the kidneys were large and pale, about three times larger in bulk than normal.—*Archives of Pediatrics*, October, 1904.

C. SIGMUND ROWE, M. D.

BATHING DURING THE MENSTRUAL PERIOD.—*Edgar* (New York) has tested the traditional belief of both profession and the laity that it is advisable to omit bathing during the menstrual period. He refers to the Mosaic code of hygiene and the custom among primitive people and eastern nations. In order to obtain the prevailing views of physicians occupied with diseases of women he addressed circular letters to a number of them, and the responses show some divergence of opinion, and the same is true of a number of authors cited. The influence of habit is exhibited by Honzell in his investigations concerning 123 fisherwomen. He found that the wading in icy water often was accompanied by normal painless menstruation, provided that the women had become accustomed to it; and that sea baths among these people could be taken from puberty to the menopause without ill results.

The majority of the replies to the above mentioned letters show that the correspondents either advise of sanction some form of bathing during menstruation. In a few instances this is limited to the last day of the period, or is restricted to mere cleansing of the vulva when the napkins are changed. A few who favored bathing *per se* omit it on the first day or so of the period. In dysmenorrhœa the majority recommend the hot sitz or foot bath. A few favor hot, full baths, and in a particular class of cases these baths are advised just before and during the onset of the flow. Some would use the hot bath until a free flow is established and pain ceases, while others have observed no efficacy in baths for dysmenorrhœa. The experiments of Winternitz appear to prove that the water in an ordinary bath does not enter the normal vagina. On the other hand the experiments of Stricker and Strogan prove that in the latter part of pregnancy of both primigravidæ and multigravidæ, water readily penetrates as far as the cervical canal. This is due to the shortening of the vagina and gaping of the vulva in the last days of pregnancy. Edgar believes that there is a distinct risk of infection of the uterus in both intrapartum and intramenstrual tub bathing. Some cases of early puerperal infection in primiparæ who have not been examined digitally, can be explained on no other grounds, and many cases of pelvic inflammation, or salpingitis and pelvic adhesions in young girls would seem to depend upon no other source of infection. The risk of uterine infection during intramenstrual tub bathing can be avoided by the substitution of the shower for the tub until after the active hemorrhage has ceased, indicating the regeneration of the menstrual decidua.

After considering some other aspects of the subject, Edgar concludes:

1. All forms of bathing during the menstrual period are largely a matter of habit, and usually can be acquired by cautious and gentle progression, but not for every woman does this hold good, and surf bathing, where the body surface remains chilled for some time, should always be excepted.
2. A daily tepid sponge bath, (85% to 92%) during the menstrual period, is not only a harmless proceeding, but is demanded by the rules of hygiene.
3. In the majority, if not all women, tepid (85% to 92%) sponge bathing after the establishment of the menstrual flow, namely second or third day, is a perfectly safe practice.
4. Further, in most women, the habit of using the tepid or tub bath after the first day or two of the flow, can be safely acquired.—*Amer. Jr. Obs.* Vol. 50, 356.

THEODORE J. GRAMM, M. D.

ACUTE YELLOW ATROPHY OF THE LIVER IN THE PUERPERIUM.—Cohn (Breslau) reports a case of this rare disease. A twenty-nine year old woman, successfully delivered for the fifth time, was taken on the fifth day with puerperium with chills followed by high fever. With nothing to account for the elevated temperature and in spite of intrauterine injections, the temperature remained high for two weeks. After a remission for three days, the temperature again rose to 104 degrees, and then suddenly returned to normal. On the 44th day post partum the patient was discharged from the hospital. For some days she had shown slight jaundice, but no special significance was ascribed to it since this symptom is sometimes associated with puerperal fever. Three days subsequent to her discharge from the hospital she was reported to be distinctly jaundiced, delirious at night, and now unconscious, and died on the following day. The autopsy disclosed acute yellow atrophy of the liver, and in addition the right spermatic vein, the inferior vena cava and both hypogastric veins were occluded by a granular brown or greenish mass.

The etiology of the disease is obscure. Richter found 41 cases in the literature, which were associated with syphilis. This factor did not exist in the above case. At present an infection is assumed to cause the disease. In this manner the disease probably began in this case, and on the two days after transient normal temperature chill occurred, it may be assumed that the liver disease began. It is difficult to decide whether the disease was caused by streptococci circulating in the blood, or by a continuance of the thrombosis of the vena cava inferior to the entrance of the hepatic veins.—*Zentralbl. f. Gyn.* 1904, 34, 1009.

ACCOUCHEMENT FORCE.—Zinke (Cincinnati) has comprehensively considered the principal methods, and arrives at the following conclusions:

1. The graduated steel and vulcanite dilators and the ordinary branched or bladed dilators are mainly employed for the purpose of dilating the cervix or os preparatory to digital, manual and bag dilation.
2. The bag or hydrostatic dilators, of which the Champetier de Ribes balloon and its modifications are the most favored, should be employed only when time is not an important element in the case; when the cervix is thoroughly softened, partly or entirely effaced, and an easy introduction of the balloon possible. This form of hystereuryisis is contraindicated in central placenta praevia and in eclampsia, mild or severe; if, in these conditions it is determined to empty the uterus, deep cervical incisions, vaginal or abdominal hysterotomy promise the best results for the mother and child. To prevent continuation of the cervical incision, a suture may be placed in the upper angle of the wound.
3. The manual dilation of Harris and the bimanual (digital) dilatation of Bonnaire and Edgar. A soft and partly obliterated cervix and dilatable os are absolute prerequisites for this variety of uterine dilatations. It is to be preferred to hydrostatic hystereuryisis when time constitutes an important element. Under this method the life of the fetus is often lost and, unless great care is observed, sepsis, lacerations, hemorrhage, profound shock, and sometimes even death of the mother, may occur.
4. Deep cervical incisions and Dührssen's vaginal hysterotomy are destined to play a permanent and important role in the management of forced

labors in the future. Many of the cases now subjected to manual and balloon dilatation will be treated by cervical incisions. It is *the* method in the presence of sepsis of the vagina, because the operation is short in duration and can be performed under a continuous flow of an antiseptic solution. An intact cervix, whether hard, elongated or not, is always an indication for cervical incision. Vaginal hysterotomy is indicated principally when the cervix is the site of malignancy or extensive cicatrization. If there be a palpable difference between passage and passenger, the Caesarian section should be the choice of the operation.

5. The indications for the conservative Caesarian section are well defined and need not be repeated now. Cervical incisions and Dührssen's operation will, however, take its place in many instances, notably in cases of marked prematurity.

6. The Bossi and similar metal dilators, if they are not entirely needless, are certainly very dangerous instruments. From what has been said it is safe to predict that rapid and complete dilatation will never become a popular method; that, sooner or later, it will receive universal condemnation, and thus reach its final and well-deserved destination, the lumber room of obstetric instruments.—*Amer. Jr. Obs.* Vol. 5. 653.

THEODORE J. GRAMM, M. D.

PNEUMOCOCCUS PERITONITIS.—Matthews reports five cases of pneumococcus peritonitis and reviews two excellent articles which have appeared in German publications during the past year, one by Jensen, of Copenhagen, and the other by von Bruns, of Tübingen. From his own experience and the literature upon the subject, he arrives at the following conclusions:

Occurrence: Pneumococcus Peritonitis is rare as compared to other pneumococcus infections, but more frequent than formerly supposed. It is three times as frequent in children as in adults; in adult life the sexes are equally affected, but under fifteen years of age it is much commoner in girls than boys. (7-1).

PATHOLOGICAL ANATOMY.—The Pathology is similar to that of pneumococcus empyema, the exudate may be almost solid or quite liquid and perhaps contain masses of fibrin. The infection may be diffused but it is usually localized in the pelvis and hypogastrium in the form of an abscess.

Associate Symptoms: Those most frequently noted are empyema, pneumonia, pericarditis, otitis media and intestinal lesions. In the majority of cases reported the peritonitis has been primary and as a rule pneumonia has not been present.

ETIOLOGY.—Jensen recognizes the following modes of infection:

1. Through a wound.
2. Through the diaphragm. This may be an actual extension of inflammation from the thorax, through the tissues of the diaphragm or a transportation of bacteria through the lymphatics.
3. Through the genitals. The greater frequency of the affection in girls suggests this, but no proof of it has been found.
4. Through the intestinal tract.
5. Through the blood.
6. From pneumococcal foci in the abdomen.

Symptoms: A typical course is followed in those cases in which the peritonitis is primary and the course can be divided into three stages.

1. Sudden onset with high fever, vomiting for a day or two, tenderness and distention. There is little muscular rigidity and the pain and distention are less marked than in other forms of peritonitis.

2. After a few days vomiting ceases and the temperature falls, often to normal. Diarrhœa, often present in first stage, is the rule in the second stage. The amelioration of symptoms is pronounced, the appetite returns and the child looks better.

3. Then, with the increase of exudate, there appears a tense cystic mass in the hypogastrium, temperature rises and shows marked morning and evening remissions and exacerbations. There is cachexia and weakness and the case terminates in death from exhaustion in from one to four months, unless relieved by operation or perforation of abscess at the umbilicus. It can easily be seen that the inflammation is of a low grade and that the symptoms are not so pronounced as in other forms of peritonitis as there usually is not much distention and the bowels can be readily moved by cathartics or by an enema.

Prognosis: This depends largely upon how well localized the disease is and upon operation. So far, the diffuse form has resulted fatally and may be expected to do so, unless future experience shows that early operation can head off such cases; but in the localized form, eighty per cent. of cases may be expected to recover when operated upon.—*Annals of Surgery*, November, 1904.

J. DEAN ELLIOTT, M. D.

FRACTURE OF THE BASE OF THE SKULL.—Walton, in a well illustrated article upon fracture of the base of the skull, founded upon Rawling's recent work (*Lancet*, April 9th, 16th, 23rd, 1904) and upon the clinical and pathological records of fifty cases, concludes:

1. In the majority of cases the basal fracture resulted from impact received in the horizontal plane of the skull, whether upon the frontal or occipital region or upon the side of the head.

2. While certain of the basal fractures extended from the vertex, there was no suggestion of the contre-coup of earlier writers.

3. The line of fracture tended to enter the fossa nearest the point of impact, and to extend in the general direction in which force was applied.

4. The line of fracture in traversing the base, tended to follow lines of least resistance, and in twenty-two of the fifty cases these lines corresponded more or less accurately to those indicated by Rawlings, but the exceptions were too marked and too constant to allow the establishment of fixed rules.

5. The sella Turcica was implicated in 36 per cent. of the fractures. The petro-occipital and the masto-occipital sutures furnished common lines of least resistance. Fractures extending across the base tended to run parallel to the petrous portion of the temporal bone and through the sella Turcica. Certain blows upon the occiput tended to cause a line of fracture extending to the jugular foramen or across the petrous bone. The portion of the petrous bone containing the auditory apparatus showed itself peculiarly liable to fracture, more often transversely than longitudinally.

6. In seven cases (14 per cent.) the fracture was limited to the base after vault impact in the horizontal plane. Neither Rawling's theory of transmitted force nor the theory of bursting fracture of von Wahl and

others suffices alone to explain these cases. The results of experiments with bodies of simpler structure would suggest that the bursting principle predominates in pure compression of the skull, and the principle of transmitted force in case of blows, while both play important parts in case of falls.

7. The orbital foramen was implicated in 21.4 per cent. of the cases of orbital fossa fracture.

8. Inequality and immobility of pupils, or both, furnish the most frequent and unfavorable sign of fracture of the base. In the forty-four cases in which the pupils were recorded, they were normal in only thirteen.

9. Injury to the cilio-spinal tract in its intra-cranial course is a more probable cause of the Hutchinson pupil and the other pupillary changes than injury to the third nerve or to the cortex, though no single lesion explains all cases.

10. The reflexes may be lessened or lost in fracture of the base as in any case of violent jarring of the brain. On the other hand they may be increased even to spasticity, probably through direct pressure upon the pyramidal tract as by hemorrhage. It is probable that the initial result of the impact in all cases is a tendency towards lessening or loss of the reflexes.

11. Profuse and persistent bleeding from the middle ear does not suggest middle meningeal hemorrhage. No middle meningeal hemorrhage was found in the cases of profuse and persistent bleeding and conversely, hemorrhage from this artery occurred eight times without and once with only slight bleeding from the ear.—*Annals of Surgery*, November, 1904.

J. DEAN ELLIOTT, M. D.

RENAL CALCULUS.—Ransochoff points out the improvements that have been made during the last few years in our ability to diagnose stone in the kidneys. Formerly it was not infrequent for a kidney to be opened and no stone found, but to-day it is rare.

In a broad way he divides the symptoms into two great groups:

1. Those due to the supposed passage of the stone through the ureter—the renal colic proper; and

2. Those due to processes constantly at work in the kidney because of its containing a stone, a condition of chronic nephrolithiasis.

In diagnosis, the renal colic per se is largely overrated, as in a large number of kidney stones there never is renal colic, and many other conditions can produce symptoms which cannot be distinguished from the passage of a stone through the ureter. Anything that will increase the tension of all the structures contained in the kidney capsule proper will give rise to such symptoms. Among these he mentioned a tumor of the kidney suddenly growing into the pelvis, the entrance into the upper ureteral orifice a mass of tubercular detritus, a twist of the ureter or a movable kidney, very acute congestions of the kidney with hemorrhage into the parenchyma and especially acute venous congestions in chronic nephritis.

This brings us to the second group of symptoms and the more important ones. Pain in the region of the kidney and tenderness found by bi-manual examination of the kidney, which is far more acute than in the early stages of renal tuberculosis and tumors.

The most important symptom in the urine is the persistent presence of microscopic haematuria. Almost every specimen examined for months will contain some red blood cells. Crystals in the urine are of very little diagnostic value in indicating stone. To be of any use at all the crystals must be found in the urine immediately after it is voided.

The temperature chart in nephrolithiasis is of secondary importance. Renal colic is occasionally accompanied by fever, there may be fever without suppuration in impacted stone in the ureter. In chronic lithiasis, on the other hand, slight elevations of temperature continued through a long period and with a distinct tendency to recur irrespective of any renal colic, are a most important element in the diagnosis.

With our nearly perfect technic in radiography a positive diagnosis can almost always be made by an X-ray photograph. A single negative result is not conclusive that a stone is not present, but a negative result after repeated attempts allows the exclusion of stone in nearly all cases. Of course a positive result practically settles the diagnosis, although occasionally the ossification of an abnormal rib cartilage or a phlebolith may simulate a stone in the plate.

Operation is indicated in the presence of stone except in those cases in which the patient from time to time after a severe colic passes a small stone. When there is a development of pyelitis, or of pyonephrosis, or in the absence of a septic infection, the production of a chronic interstitial nephritis with atrophy of the pyramids and great thickening of the capsule, operation is especially indicated, and calculus anuria shows an absolute necessity for an early operation.

The operation should be nephrotomy, removal of the stone, and suture or drainage of the kidney, depending upon the absence or presence of pus. Even with considerable pyelitis the kidney can be sutured if the ureter is competent to act as a natural drain.

Primary nephrectomy, as indicated, should never be performed for stone except when hemorrhage is uncontrollable.—*Medical News*, November 26th, 1904.

J. DEAN ELLIOTT, M. D.

SUBCUTANEOUS FEEDING.—Beck, in a review of the recent advances in surgery, describes subcutaneous feeding in those disturbances of the gastro-intestinal tract, when nutrition by mouth or rectum is impossible. Friedrich injects 40-100 grams of grape sugar in a three per cent. solution per diem. Recently he tried also the pure pepsin peptone free from albumoses. A useful combination consists of two grams of grape sugar, two grams of table salt and four grams of pepsin-peptone to 100 grams of water. Especially in very severe disorders, like perforation of the stomach or intestine or severe peritonitis, subcutaneous feeding is apt to tide the patient over the critical period. Similar good results have been obtained by Credé in using a meat preparation which contains soluble albumen in a readily assimilated form, 95 per cent., and traces of iron and salt, two per cent. This preparation, called kalodol by him, resembles the albumen in the circulation, thus explaining why it is so easily assimilated. About four kalodol injections per diem suffice for a patient.

Rectal injections of kalodol may also be resorted to, as it is easily absorbed.—*Medical News*, December 10th, 1904.

J. DEAN ELLIOTT, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.,

with the collaboration in German literature of Oscar Boericke, M. D.,
and in French literature of Charles Platt, M. D.

A POINT FOR THE DETAIL MEN TO NOTICE.—The true physician is the man who treats his patients without reference to the remuneration that he shall receive, and the man who would arouse in the minds of medical men the commercial spirit of the times, ignores the interests of humanity and would lower the standards of our profession. So says the writer quoted in *Clinique*,—and we may add that those commercial gentlemen who are constantly telling us that the practice of medicine is simply a matter of handing out some tasty, quick acting palliative in exchange for a dollar, are lowering our standards every time we listen to them.

GLECHOMA HEDERACIA.—This is the common Ground Ivy. A tincture prepared by percolation with seventy-five per cent. alcohol. It has been found useful, by C. W. Seely, M. D., in urticaria. It seems to resemble Apis and Rhus tox. The indications for its use are small elevations of the skin, of a pale reddish or even white color, accompanied by severe itching, burning and stinging. Aggravation is at night and these spots are each surrounded by hyperæmic skin. Severe stinging sensations at different points, leaving quickly to reappear in different places, is also an indication for the remedy. —*Eclectic Medical Journal*.

SOME OLD PRESCRIPTIONS:—In the case of frost bites, when they break, take bear fat mixed with powdered horse-teeth, cover the sores with this ointment, and they will get well quickly. Horses have a little bone in their heart the size of a dog's tooth—use this to pick your teeth when they ache.

In case this fails, simply touch the aching tooth lightly to the teeth of a young and frisky colt—you will not be troubled in that way any more. The best way to cure snoring, is to take out one of the teeth of a healthy stallion, and place it beneath your pillow. You will be quiet after you do that. For worms it is only necessary to catch some blood from the tail of a horse in any convenient vessel and drink it. These prescriptions and many others of like nature are over three hundred years old. They were made in Germany, and therefore deserve the attention of those who like such things. Dr. Herman translated them for *Clinical Reporter*.

CANNABIS SATIVA IN CHRONIC GONORRHOEA.—This remedy has been my sheet anchor in many cases of chronic gonorrhœa, and the rapidity with

which it will take hold of an old case and cure it, is pleasing alike to patient and to his physician. The morning drop changes from yellow or greenish color to paler and ultimately disappears.—D. M. Gibson, M. D., in *Clinical Reporter*.

INDICAN AS A SIGN OF BEGINNING NEPHRITIS.—Clifford Mitchell, M. D., says that if we find a brilliant indican reaction continuously in the urine of a middle-aged man, we should warn him to beware of contracting kidney.—*Century*.

PROLAPSUS RECTI.—*Ferrum phos.* 6, one of the best remedies for this disorder occurring in children.

Aloe, like *merc.*, if condition be attended with diarrhœa, dysentery and tenesmus.

Podophyllum, adapted to those cases where the prolapsus occurs after stool (morning aggravation), or violent muscular exertion, or efforts like sneezing.

Muriatic acid, if occurring during micturition.

Ignatia, for hysterical-nervous persons, markedly constipated; also crying children with blue, bloody anus and painful defecation.

Calcarea carb., valuable in chronic cases of children.

Sepia chronic cases of adults aggravated by any motion.

Arnica, 4x t. i. d., teaspoonful doses, has been highly praised.—*Journal Belge Hom.*, March, 1904.

Dr. Schaper (Berlin) waxes enthusiastic over the results of homœopathically selected remedies in an advanced case of *elephantiasis*, which had obstinately resisted all local and allopathic treatment.

The only remedies used were iodine dil. 3x gtt. x every two hours, which materially reduced the lymph secretion within a few days, without, however, influencing either the pains or the nodular infiltrations, which yielded markedly to graphites, 3x trit., gr. v every two hours.—*Leipziger Pop. velt-schrift*.

DISEASES COMMON TO OLD AGE.—In a very readable article upon this topic, published in *Monthly Review*, Dr. A. M. Cash says that he has found the constipation of the aged frequently amenable to *Lycopodium* 6x. trituration. An atonic condition of the bowels is present, with flatulent dilation of the colon; and this remedy, either with or without *Nux vomica*, often helps, toning up the feeble muscular fibres. Insomnia, which is a troublesome ailment in advanced life, requires *Coffea*, 6x. dilution. Especially is this remedy useful when the insomnia is associated with a nervous anxiety with worrying thoughts. *Aconitum napellus*, also in the 6x. dilution, has been useful for the restlessness and excitability that so frequently accompanies the insomnia of the aged. We are pleased that the author refers to the great value of systematic abdominal massage in the treatment of the constipation of old people. We have thought that a large number of our cases have been greatly benefitted by massage along the line of the colon. In the vertigo of the aged, *Digitalis* and *Cocculus* and *Bryonia* are mentioned. *Conium* 30. has been a remedy that we have used very often with prompt good effects, in the persistent and alarming vertigo of old men who are the subjects of senile changes in heart and arteries. *Iodine* is another

remedy that should be consulted in similar cases. In the hypertrophied prostate of advanced life, the writer has found *Ferrum picricum* 2x., in two grain doses three times daily, very useful. In chronic cystitis, with painful and frequent micturition, *Belladonna* and *Cantharides*, afforded relief. *Canabis indica* 1x. allayed the sufferings of an acute attack of spasmodic dysuria. Of the skin affections, prurigo senilis is often severe and may be a formidable and intractable disorder. Those cases depending upon some external irritation or those caused by glycosuria, gout, or jaundice require special treatment. A certain class, however, are probably dependent upon a slowing of the circulation due to general feebleness and heart debility, causing stasis in the skin capillaries. Very helpful here is *Rhus venenata* 6x. or higher. *Sulphur* may be given once daily and the *Rhus* every four hours. In the more chronic forms, *Arsenicum album* may be useful, but must be persevered with, as its action is slow.

CHRONIC CONJUNCTIVITIS TRACHOMATOSA, THUYA.—Dr. A. M. Cash relates the case of a man aged 81 years, who had large fleshy granulations which pushed out the lower eyelid and kept his eyes in a constant state of watery irritation. Thuya 12 x. was given twice daily, and Thuya tincture was painted lightly over the granulations, twice a week. In two or three months, there was great improvement. The unsightly, painful, granulated everted lower lids seen in the aged would suggest this treatment.—*Monthly Homœopathic Review*.

THE IMPORTANT MATTER OF UNDRESSED POULTRY.—It has been a matter for surprise that the medical profession, generally so keen to scent any possible public danger that might arise from impure or adulterated food or drink, has never seriously considered that important subject—the widespread and very general use, by our citizens, of undressed poultry. It will take but a moment's contemplation of this matter to convince even the most complacent that every animal killed for food purposes should be drawn or dressed as quickly as practicable or possible after its death. As an illustration. We were recently informed, by one who should know, that butchers of sheep and lambs recognize the fact that decomposition takes place very rapidly in the abdominal organs of such animals; and that any unusual delay in the evisceration process, will likely be followed by tainting of the flesh of the animal. The peculiar flavor, described sometimes as "muttony" or "wooley", has been often attributed to contact of the flesh of the carcass with the wool of the animal. We have been informed that this latter explanation is probably an incorrect one, and that it arises more than likely, from delay in the removal of the abdominal organs. Our markets are full of chickens, turkeys, ducks, birds and game which have been killed and sent to the dealers with internal organs intact and in place. This happens during the heated term as well as in the cooler seasons. Cooks are generally apt to observe, when drawing a fowl, any suspicious odor of decomposition in its internal organs, and they should invariably regard the same as evidence that the fowl is unfit for use as a food. When we consider that much of our poultry has been kept for a variable period in cold storage in this undressed state before being exposed for sale, the moral is obvious and unavoidable. In some cities it is almost

an unknown thing for an undressed fowl to be offered for sale in the public market houses. Such a commendable custom should be universal.

TEMPERAMENTS.—In many cases of the older homœopathic writings temperament was intended to teach only morbid mental states, conditions and symptoms. Recently these have been twisted into a sort of justification of the phrenological temperaments, and we notice many writers saying too much about the "temperament" of the patient when reporting their cases. Our remedies will cure their symptoms in all kinds of temperaments. It is a bad habit to associate remedies with certain kinds of people, except it be upon conditions that are really morbid. The mild disposition being normal in any given patient is not a symptom; but, when one of an opposite mental state becomes mild in sickness, then it is a symptom of great importance. Pulsatilla will cure brunettes as well as blondes, if the symptoms are present that require that remedy.—Dr. Kent, in *Critique*.

ANTIMONIUM SULPHURAT. AURANTIACUM.—This remedy really deserves greater attention in cases of *chronic bronchial catarrhs* than has been heretofore accorded it by the profession. To attain the best results it must be given in the lower potencies (2-3 trit.) in cases of *dry catarrh* with scanty, difficult expectoration, or emphysema, upon the supposition of eliciting the primary action, which is that of a stimulant expectorant. Dose: 3-4x. t. i. d., a powder 2 decigramms.

On the other hand, in intractable cases with mucorrhœa, the remedy is given for its resorptive virtues, and for this purpose the higher potencies (5x-6x) are specially recommended.—*Leipziger Pop. Zeitschrift*, August, 1904.

SUNLIGHT AS A DIAGNOSTIC AND PROGNOSTIC REMEDIAL MEASURE.—It is an old, even traditional observation, that the sick whose faces and bodies readily tan upon exposure to sunlight offer by far a greater chance of recovery than those whose skin remains unaltered. Rikli, the apostle of the "light therapy remarks," an interesting and significant observation, in the judgment of the gravity of a disease, is to be adduced from the various grades of skin discoloration arising during the sun-bath cure. These range, in most diverse shadings, from a bleached whiteness to a scarlet red, later on a dark mulatto brown. The conclusions which careful observation of many years justifies are, that the more rapid and complete the discoloring of the skin proceeds, the greater the prognostic certainty of improvement and recovery, and conversely the slower the skin of a patient tans, the more unfavorable the prognosis of recovery.

Upon the arena of the sun-bath gallery at Veldes one observes patients who regularly avail themselves of the sun and light-baths during the most intense heat of July and August, and, notwithstanding, remain bleached white as sheets, because the red corpuscles, owing to the internal disease process, are debarred from proper peripheral circulation.

In these cases the prognosis of an incurable affection seems inevitable. A cancerous or tubercular patient, or one suffering from cerebral softening, is absolutely unaffected by such a course of treatment. It may be surmised that not only the faulty peripheral circulation, but also the morbid condition of the blood itself in such patients, inhibits the beneficent influence of the solar rays upon the integument.—*Allgemeine Hom. Zeitung*, September, 1904.

THE HAHNEMANNIAN MONTHLY.

FEBRUARY, 1905.

A FEW THOUGHTS CONCERNING THE SURGERY OF THE PANCREAS.

BY WILLIAM B. VAN LENNEP, A. M., M. D., PHILADELPHIA, PA.

(Read before the Philadelphia County Homœopathic Medical Society, Nov. 10th, 1904.)

THE trend of abdominal surgery has been from below upward, the ninth decade of the last century seeing the perfection of the surgery of the pelvis, what is generally classed under gynæcology, the tenth that of the mid-abdomen, notable for the work in lesions of the appendix, while with the advent of the new century comes the era of the upper abdomen. First, the gall-bladder and its ducts, then the revival of stomach work upon rational, anatomical and pathological lines and lastly surgical attack upon the deep, central, retro-peritoneal pancreas. In each era we can point with pardonable pride to the initiative taken by American surgeons and in each instance we can be equally proud of the science and art of Chirurgy. In the past the internist has been enlightened by the pathologist, the latter explaining the symptoms found by the former, only as elucidated by the end or lethal results, but of late to the surgeon has fallen the lot of demonstrating the early lesions, those in which a life-saving therapeutics can be applied before it is too late.

Two classic examples may not be out of place: First, John Hunter describes an autopsy upon a youth, in whom he found a diffuse suppurative peritonitis, among the lesions of which the appendix was *incidentally* involved to a gangrenous degree!

Second, A patient dies of gastric hæmorrhage and the autopsy reveals at most the trivial erosion of Dieulafoy, but the surgeon demonstrates during life the "weeping patch" around it and controls the bleeding by splinting the stomach with a gastro-enterostomy.

Just as the surgery of the kidney may be said to date its origin from Simon's nephrectomy for renal fistula in 1869, so may Gussenbauer's operation for pancreatic cyst in 1882 be termed an epoch-maker in the surgery of the pancreas. His procedure, incision, evacuation and stitching the sac to the parietal peritoneum, practically represents the treatment of this condition to this day, for it is only possible to practice enucleation if a pedicle is found or can be fashioned. Owing to this prevailing method of treatment, our knowledge of the exact nature of these cysts is limited. Thus, the fluid from a true pancreatic cyst is often so altered as not to give the characteristic ferments; or the pancreatic fluid may digest the epithelium of a true cyst-adenoma, so that it will heal when drained; while the same process may erode the blood-vessels and produce the hæmorrhages we would expect to find in a spurious cyst of the bursa-omentalis; finally, the latter condition may arise from a laceration of the capsule and a pancreatic fistula develop during healing. The salient clinical features are the history of traumatism (occasionally of pancreatitis), ancient in true cysts, recent in the spurious or false; symptoms due to pressure, notably on the cœliac plexus, producing pre-eminently pain; or upon the stomach and intestine, with the obstructive results one would expect. Aside from these, there will be found the objective signs of a cystic tumor, at most recognized as retro-peritoneal, pushing forward, as shown by artificial distention of the stomach and colon, either through the gastro-colic omentum, or more rarely through the gastro-hepatic; through the transverse meso-colon or between its layers, forming in fact as well as in symptoms a mesenteric cyst.

The more recent advances concern particularly the inflammations of the pancreas and while these are sufficiently rare to preclude any one individual from having a personal experience sufficiently large to be of statistical value, they occur with a frequency that makes it desirable that practitioner and surgeon should be familiar with their phenomena.

Fitz's classification into hæmorrhagic, gangrenous and suppurative applies to the acute process and is one rather of de-

gree, so that following Robson's plan of calling the pancreatic inflammations, acute, subacute and chronic, we might term the hæmorrhagic, hyperacute; the gangrenous, acute; while in the suppurative, the process is more apt to merge into the milder, subacute form. As a rule, acute pancreatitis has been diagnosed bowel-obstruction or perhaps perforative peritonitis, the patient has been eviscerated, under a general anæsthetic, in the search for the occlusion or leak, or the operator has recognized that the pathognomonic areas of fat necrosis meant a hopeless pancreatitis when in either case, "the incident was closed," including the abdomen usually and the patient's life regularly!

The symptom complex is certainly misleading; there is *vomiting*, of stomach contents, dark material, perhaps blood, and although not projectile, it is certainly energetic at first; *constipation*, not always absolute, but often hard to overcome; *distention*, from the above, from neighborhood atony, or from an oncoming peritonitis; *pain*, agonizing in character and in the correctly diagnosed cases, an overshadowing symptom, unless it is equalled by the *collapse*, so profound at times as to preclude any interference whatever. To the last two should be added a condition of more or less marked cyanosis of the extremities and epigastric tenderness with a tumefaction which may require an anæsthetic for its recognition. The less acute the attack, the more likely is this enlargement to be felt. If the pain then is recognized as beginning in the epi-gastrium and the tenderness, rigidity and distention as affecting the upper abdomen, the profound cyanotic collapse should suggest to the careful observer the solar-plexus proximity of the lesion with sufficient certainty to make a tentative diagnosis possible and once this is made the patient's chances are much improved.

A knowledge of the etiology is often of value. Thus, acute pancreatitis is usually met with during middle life and particularly in men, those showing a tendency to obesity, with the coincident degenerative changes in the organ which would favor hæmorrhage. Arterio-sclerosis and alcoholism, with syphilis, seem to exert a caustive influence worth remembering. The causes so far mentioned tend to induce pancreatic bleeding and with hæmorrhagic dyscrasia undoubtedly give rise to the so-called apoplexies which closely simulate the acutest inflammations. They may be operated for this reason occasionally, but the constitutional condition makes the prognosis

almost hopeless. The pathology is readily understood: a small hæmorrhage liberates the ferments which in turn digest the gland and erode the vessels, spreading the process until the entire organ is involved. While the exudate in such cases may be sterile, yet pancreatic fluid mixed with blood, is toxic and irritating, preventing limiting adhesions, setting up a peritonitis and forming a pabulum which invites bacterial invasion and growth. Much more virulent are those cases in which infection is superadded and we should therefore remember the paths of the same: (1) the circulation, when the pancreatic inflammation is part of a general process, septicæmia and pyæmia; (2) neighboring organs, as the stomach in case of perforating ulcer adhering to the pancreas, and (3) the ducts. As a matter of fact many cases give a previous history of gall-stones, especially with calculi impacted in the ampulla of Vater. Retrojection of "catarrhal," that is to say, more or less septic bile follows, as this stream is the stronger and an ascending infection goes with it. Such invasion of the pancreatic ducts directly from the duodenum is not as likely to occur as in the biliary ducts, because of the bactericidal property of the pancreatic fluid. Not so, however, when a traumatism has produced a leakage of blood and ferments, which provide the ideal, non-resisting incubator. Hence, in the order of their frequency, we should bear in mind cholelithiasis, traumatism and gastro-duodenal catarrh as the most common exciting causes.

Recent operations have developed several encouraging facts: The condition described calls imperatively for surgical intervention, no matter what diagnosis is made, local anæsthesia having been used in at least one successful case (Hahn). The abdomen once opened, the recognition of areas of fat necrosis or a hæmorrhagic exudate or both, throw out obstruction and perforation and point unquestionably to the pancreas, enlargement of which can then be recognized by direct manual examination. The protracted, unsuccessful search of the past is thus avoided and the operator has the choice of two methods of procedure, both of which have been successful: Mere douching with salt-solution and gauze drainage (one recovery in nine or ten), with probably subsequent operation on the necrotic organ or, in addition to this, opening and evacuating the omental bursa through the gastro-colic interspace, incising and tamponading the pancreatic "phlegmon," draining with gauze

and tubes, either anteriorly or posteriorly through the left costo-vertebral angle, or both (probably two-thirds recovering).

In the diminishingly acute cases we gradually come down to Robson's second class, subacute pancreatitis, a suppurative, possibly a gangrenous or even a hæmorrhagic process, encysted and limited probably to portions of the gland. There is more time for diagnosis and a better outlook from operation. Aside from strictly pancreatic symptoms, there will be those of a deeply-seated septic process, going on to subphrenic abscess if the lesser cavity of the peritoneum is invaded, or to any of the forms of "gravitation" abscess, if the pus breaks into the retro-peritoneal connective tissue. Aside from the general surgical principles on which such results must be reached and evacuated, there are several methods of attacking the pancreas itself: through the gastro-colic or gastro-hepatic omentum; through the mesentery, after raising the transverse colon and stomach; by breaking through under the duodenum to get at the head of the organ and by reaching the latter or the tail retro-peritoneally through the right and left loins respectively. The two posterior routes are usually limited to counter-openings, especially as on the right side, the portal vein, the bile ducts and the middle colic artery are readily injured, the latter accident of course causing gangrene of the colon.

In these subacute cases we are occasionally able to avail ourselves of some facts based upon the physiology of the pancreas. Thus, free fat in the stools or the presence of undigested muscular fibre point to disturbed pancreatic function. So too does the much more uncommon lipuria. Aside from these digestive symptoms, destruction of the parenchyma, the Islands of Langerhans will produce a glycosuria which usually results fatally if the entire gland is removed, although an occasional case of several months' duration almost makes it possible that we can exist without this organ. The only clinical value of such a glycosuria so far, is the recognition of its transient presence at the inception of an acute inflammation (Woolsey). Far more important, if corroborated by experience, will be the work of Cammidge and Robson with what they term the "pancreatic reaction" in the urine. By such chemical tests they hope to recognize the presence of pancreatic inflammation, distinguishing the acute from the chronic form and the latter from malignant disease, operation being to be deplored in the one and extolled in the other, as will be shortly shown.

In chronic pancreatitis our knowledge is largely based upon the studies of Opie and the work of Mayo-Robson. In the etiology cholelithiasis holds the most important place, gall-stones at the junction of the two streams damming back the bile into the duct of Wirsung and infection from the often coincident cholangitis spreading along the same channel into the pancreas. To these might be added as rarities, pancreatic calculi and the cirrhosis of alcoholism, similar to that producing the "hob-nail" liver. Clinically it has been shown that chronic pancreatitis closely simulates carcinoma of the pancreas and that proper surgical procedures in the former are pre-eminently curative. This resemblance is particularly close when either disease affects the head of the organ, so that at times, even after opening the abdomen, they cannot be distinguished by inspection and palpation. Probably malignant disease is more nodular or less rounded and infiltrating adhesions are more apt to be present, but confusion as to their character has occurred even in the most experienced hands. The same uncertainty often exists regarding cholelithiasis, these enlargements of the pancreatic head compressing the common bile-duct and giving the "jaundice with distended gall-bladder" formerly considered so characteristic of malignant as contrasted with gall-stone disease. The exception of course would be when calculi had previously *cicatrized* the walls of such a gall-bladder, but the association was sufficiently constant to give a good clinical working rule. It might be well to add right here that it is in such cholæmias, with pale-stools, containing free fat and undigested muscular fibres, that we meet with the hæmorrhagic tendency formerly attributed to retention of bile.

The important practical inference from the above facts is that chronic pancreatitis should be operated without undue delay and that malignant disease is of course best left alone. It is to be hoped that the chemical, urinary tests referred to may throw the necessary light upon the subject.

From the standpoint of our present knowledge the operative treatment may be summed up as follows: The abdomen is opened through the right rectus, over what I might term the "storm centre" of the upper abdomen—pylorus, duodenum, biliary and pancreatic ducts and the head of the latter organ. Impacted duct calculi low down can be reached by incising the peritoneum to the right of the duodenum, or by McBurney's method, opening this portion of the intestine and slit-

ting up the papilla major or even its fellow to enter the duct of Santorini. In several of Robson's cases, where the vicious circle of obstructed outlet or infection with resulting tumefaction of the head of the pancreas, which in turn compressed the common bile duct, relief of tension and the curative drainage of cholangitis was obtained by cholecystostomy. Some operators have tried to avoid the annoyance of a biliary fistula and the danger of a ventral hernia by carrying out a cholecystenterostomy. It is an open question with many whether the danger of infection from the intestine does not more than counterbalance the disadvantages avoided. Miculicz, in his most instructive address on this subject, before the Congress of American Physicians and Surgeons last year, advises adding an entero-anastomosis several inches below that with the gall-bladder to deflect the intestinal stream from the latter.

The remaining class of cases, pancreatic traumatism, are probably more frequent than has been hitherto thought, especially those of moderate degree. We have seen that many cysts originate in this way and so too do many of the inflammations; slight lacerations no doubt heal spontaneously, the purely pancreatic symptoms calling for surgery being a progressive anæmia with the objective signs of intra-abdominal blood accumulation and those of peritoneal irritation. In fact it is a good rule to look out for the pancreas in any injury to the supra- or peri-umbilical region. On account of its protected position we can readily understand that wounds or crushes seriously injuring the pancreas must produce coincident lesions of neighboring organs and many cases are recorded in which at autopsy the former were found to have been overlooked and caused death. (There is perhaps no more familiar example than that of our own President McKinley). Lastly, it seems a safe proposition to state that an injury to the pancreas being reasonably *suspected* (or for that matter an acute or chronic inflammation) an exploratory incision is justified. This, in view of the mortality following inaction and the recoveries after operation, increasing as they do the sooner the same is properly carried out. Operation once decided on, there are several points to be borne in mind: the principal dangers are hæmorrhage, combined with leakage of pancreation secretion. The former from such a vascular organ is often hard to control, the usual measures being deep sutures, ligatures *en masse* and especially tamponade. (The writer met with a case

to-day in which the last method stood him in good stead). The irritating exudate is best removed by free saline douching and in every case, whether sutured, ligatured or packed should be followed by capillary drainage.

THE TREATMENT OF ACUTE MANIA, WITH A REVIEW OF ONE HUNDRED AND EIGHT RECOVERIES.

BY AMOS J. GIVENS, M. D., STAMFORD, CONN.

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ACUTE mania may be defined as a condition characterized by an unnatural state of mental exaltation that is out of all proportion to any logical cause, by more or less violent and constant muscular movement, together with great talkativeness, loss of self-control, and a complete change in the habits and modes of life. Ordinarily a first attack appears between the ages of twelve and twenty-five years. It is said to be more common in women than men; and to occur most frequently among persons of the so-called sanguine temperament, who are bright, lively and strong. It is most frequent in the early spring and summer; and in its mild and acute forms lasts the shortest time of any disease of the mind.

Mania is one of the most curable forms of insanity when conditions surrounding the patient are favorable. It is estimated that if treated within the first six weeks, seventy-five per cent. of the cases will recover; after six months, fifty per cent. of recoveries may be expected; and then there is a rapid decrease in the ratio of cures to the end of the first year, when ten per cent. of recoveries may result from treatment. The young have a more favorable chance than the old; and in women recovery is said to be slightly more frequent than in men.

There are three broad clinical divisions of the disease. The first is mild or sub-acute mania, sometimes called Simple Mania; the second is the Acute form; and the third is known as Chronic Mania. In the mild or simple form the patient talks, acts and feels like a person slightly under the influence of some stimulant.

In very mild cases of the disease under consideration, the patient may appear simply gay, or cheerful, to an exaggerated degree, or somewhat aggressive, or persistent and stubborn; and perhaps busy about a hundred things that are begun but never finished; changing quickly from one idea to another, and from place to place, never still for long, never at rest, but apparently good-natured and pleasant. This is the *hypo-mania* of Kraepelin. The patient is lively, talkative, full of restless energy, seems capable and strong, and is considered by casual friends to be unusually accomplished and industrious. In the family, however, both his conduct and ideas are recognized as peculiar. The uncertain temper, the quick restlessness and excitement, the succession of ideas, the great flow of talk, and the rapid, changing mood cannot be mistaken by discriminating relatives for conditions other than those dependent upon some form of brain trouble. Acute mania presents a picture of violence and commotion. Chronic mania is present when the extreme violence of acute mania gradually wears away, without complete recovery, leaving some weakness of mind, together with mild delusions or hallucinations, and inability to conduct life according to the standards of the patient's education and social position. This condition of defect prevails, in spite of increased weight, definite improvement in nutrition and in all bodily symptoms, and a general state of fair health.

Acute mania is of comparatively short duration. Some attacks are over in a few days; others last several weeks; and in other instances several months may elapse before a cure is effected. There is a tendency for acute mania to run a definite course, not limited as to duration. In its characteristic form, acute mania rarely lasts longer than a year. Its average duration is about three months. Acute mania may exceptionally terminate in dementia or pass into a condition of chronic mania, and still result in recovery. The tendency toward an increase in violence is slight. The patient generally shows the worst of their complaint during the first few weeks. There may be remissions in the severity of the symptoms, followed by periods of increased excitability. In cases that do well, after a time the period of improvement continues unabated; sleep is less disturbed, hallucinations are less frequent and not so marked in character, and delusions are less persistent. Even in cases of chronic mania there is always a possibility of cure. An occasional recovery takes place at the end of ten or

fifteen years. This happy result is chiefly due to persistent and rational treatment in some environment suited to the patient's special needs, where sedatives and hypnotics are avoided and open air exercise, bathing, good food and appropriate occupation utilized to produce sleep, rest and quiet.

Besides hypo-mania, there are certain arbitrary sub-divisions of acute mania, terms used merely for convenience and to express different varieties of a condition in which the chief characteristics are merely altered in degree. These conditions are known as transitory mania and acute delirious mania. Hypomania is the mildest form of maniacal disease; and acute delirious mania the most violent. Transitory mania is an exalted type of acute mania of short duration, coming on suddenly and lasting but a brief period, an hour, a day, or two or three days, sometimes less than an hour. The superficial and deep reflexes are usually exaggerated and the pupils dilated. Acute delirious mania is a violent and frequently fatal form of the disease, in many particulars resembling a malignant typhoid fever. The patient is more restless than in ordinary mania, and sleeplessness is more constant. The face is flushed, the pulse small and rapid, respiration quick and sighing. Incoherence, hallucinations, and delusions are present. Food is refused, swallowing seems to be painful, the tongue being dry, cracked and leathery. There is a rapid wasting of the body, and increasing exhaustion. The patient may die within a fortnight, possibly recover with slight mental defect, or remain the rest of his life in a condition of dementia. Acute delirious mania is usually preceded and appears to be caused by some profound physical exhaustion or overstrain. It is, fortunately, a rare form of disease in any country, though the French, German and English-speaking authors have had occasion too often to describe it. Sometimes doubt is cast upon the belief that it is mania at all. Some authorities incline to the idea that it is some acute infectious process, of a nature as yet unknown, which rapidly disintegrates the human organism.

In pure maniacal excitement or simple mania, patients often appear stronger than they really are, and more intelligent than in health. It has been noted that some persons are vastly improved during a slight attack, becoming more congenial, better mannered and brighter. It is said that the most awkward man becomes easy and graceful when suffering from an attack of acute mania; but this apparent improvement lasts but a short

time. It is never present in severe cases or those of long duration, for nutrition is sure to be affected sooner or later. The skin may then become dry, roughened or shrivelled, the hair rough and wiry, the nails brittle, the complexion dull and muddy. The face may be flushed, discolored, and puffy. Sooner or later appears an air of coarseness not natural to the patient. The change in tastes and instincts is often marked and peculiar. The same food is not relished as in health, repugnance and aversion develop, and former friendships are altered or lost. Unconventionalities of all sorts are indulged in, unless the patient is under supervision and prevented from following his inclination. The higher intellectual tastes may also undergo a radical change, and books be read that formerly gave no pleasure.

While the onset of definite symptoms is usually sudden, in many of its forms mania is often preceded by a period of depression. Digestive disturbances, with loss of sleep, may be the first symptoms that attract notice. There may be headache during the early stage, a headache which is general. There is a characteristic feeling of fullness and pressure, but seldom any local pain. Irritability and restlessness are followed in a short time by true maniacal excitement. When sufficiently marked, this is recognized without difficulty by the most ignorant and inexperienced as a distinct and definite disease of the mind. It is the picture of this manifestation of mental disease that the word insanity usually conveys to persons not familiar with the subject by study and observation. The alteration in speech and conduct is so marked in acute mania that the entire personality seems altogether different from that of mankind in general, even to the inexperienced. The element of mental unbalance is too prominent to be mistaken. Courtesy, restraint and moderation are altogether wanting. And this diminution of the essential qualities of polished civilization makes it easy to pronounce a man mentally unsound, when to this lowered tone of conduct is added a total lack of self-preservation and of the fulfillment of all responsibilities. There is also marked carelessness in dress, to confirm the verdict; together with unexpected incivility, impulsive acts, and all manner of startling embarrassments for the patient's friends.

In pronounced and characteristic conditions the patient may be in constant motion, walking up and down, talking all the

time, gesticulating and swaying the body, sometimes laughing aloud or screaming. All the emotions are greatly exaggerated. Unmeaning gaiety, a rapid change of ideas, an unreliable condition of temper, and often incoherence of speech, constitute some of the important and characteristic symptoms of this form of mental disease. In this confusion and sudden change of thought, all knowledge of surroundings may be lost; and strangers may be greeted as members of the family, or relatives be denounced as enemies. Even personal identity may be mistaken for that of another; for some important or purely imaginary person, perhaps for an animal, a bird, or for a creature that never existed. In the state of altered personality in mania, all the senses and perceptions are sharpened. There is keen alertness of every faculty, and the patient hears and sees with extraordinary acuteness. The attention is lively, though unstable, with the result that nothing passing is unperceived. All sounds, sights, odors, etc., are equally important to the over-sensitive organs of hearing, touch, taste, smell and vision. Proportion is lost; and events and actions do not retain their proper place. The hurrying mass of details first brings about simple confusion of mind; then nothing is understood aright. Memory is weakened; ideas of time and space may be obliterated. The patient lives in a land of dreams and kaleidoscopic change. In acute mania the process of thought is really retarded and not increased. Its activity seems to be augmented on account of the general exaltation; but there is inability to give direction to the train of ideas. Everything that occurs to the patient is spoken of out loud. There is no reticence on any subject. This gives an impression of extraordinary alertness that is not borne out by facts. Ceaseless chatter and incoherence often result, not from any excess of ideas, but from a lack of power to choose which subject to select and speak about among the mass of hurrying details. The patient must talk, impelled by imperative influences that are the outcome of disordered nerve action. In chronic mania, it is not uncommon for speech to be incessant throughout the waking hours.

Hallucinations and delusions of various kinds may occur in mania, though the disease may run its course without either. Illusions are common. When hallucinations do exist, they are generally of a pleasant nature. Delusions are of an exalted type, of wealth, importance, position and power. The charac-

ter of the delusions may be of a fleeting nature, changing from day to day, from hour to hour, from minute to minute. Hallucinations of sight are frequent; those of hearing are not so common. The handwriting is altered in character, and may be difficult to read. It shows in a marked degree the confusion of the patient's ideas. Words are left out or constantly repeated. They may be underscored many times. Or there may be special marks at the margin of the paper to call attention to particular passages. There is a tendency toward senseless rhyming, both in speech and writing, and repetition of isolated syllables and disjointed words. Letters to friends may be made up almost entirely of separate words, without apparent continuity or relation, suggested by similarity of sound or by some obscure resemblance of meaning.

Mania at the onset may easily be confounded with alcoholic intoxication, with the frenzied condition sometimes connected with an epileptic attack, with paresis, or with agitated melancholia. In the latter condition there is a marked deficiency in the number of associated ideas and well-defined depression in the character of the delusions. Paresis is differentiated by the age of onset, by spinal and pupillary symptoms, and by the characteristic delusions of vast possessions and personal importance. In alcoholism there is tremor, a temporary speech defect, and disagreeable visions of reptiles or animals, hallucinations quite different from the usual pleasing ones of mania. When due to epilepsy, a history of previous convulsive seizures will aid in explaining the true nature of the attack. The mental exaltation has been truthfully described as a morbidly increased and irregular production of mental acts, with or without a sense of well-being, but distinctly without a conscious sense of ill-being or pain. The emotional outbursts or more even conditions of feeling are of two kinds,—joy and rage. These vary in degree, from abnormal cheerfulness to wild fury. The word "excitement" has reference to visible muscular acts, as body restlessness, muscular resistance, acts of violence, shouting, facial contortion, or movements or expressions of the eyes. To an intense desire toward such acts, only restrained by a strong exercise of self-control, the term "suppressed excitement" is applied.

Bodily temperature may remain unchanged; or be increased in severe cases. In sub-acute and acute mania it is from half a degree to a whole degree higher than

in health; sometimes one or two degrees higher. If much over a hundred, there is strong presumptive evidence that some disease process other than mania is going on, some inflammation or infection, possibly some organic brain trouble. The pulse varies. It may be small and quick, full and bounding, or weak and slow. The tongue is apt to be coated, sometimes red or glazed in patches. There are disturbances of intestinal digestion; and abnormalities of the function of menstruation in women. The urine in mania is not much changed, unless there is excessive perspiration or great excitement, in which case it is diminished in quantity. The reaction is acid in maniacal conditions, especially during periods of excessive movement and exaltation; and the specific gravity is also somewhat increased, according to the degree of emotional and muscular activity that is present. Urea is relatively increased. Albumin may be found in the urine in mania without disease of the kidney. The appetite is capricious, without much wish for food in the early stages; the tendency, however, is usually toward excess in eating. Even with a ravenous appetite, there is no gain in flesh during the acute stage of mania. The patient may forego eating through sheer inattention, and sometimes requires feeding with a spoon or in a more mechanical way. The dangers in mania are, first, exhaustion and death; next, either a partial convalescence or no improvement at all that constitutes the condition known as chronic mania; or, last, as the outcome of the attack, a decay of mind that results in dementia. To avert any one of these catastrophes, treatment must be prompt and discriminating, and faithfully carried out for some length of time.

In hypo-mania, the mildest expression of the disease, improvement takes place slowly. This form of mental trouble lasts several months, sometimes a year. For it, a long sea voyage on a slow ship with a good nurse is sometimes the best possible treatment; or a change of residence, where the surroundings are agreeable, though not exciting. Quiet, fresh air, non-stimulating food, rest, freedom from all exciting conditions of life and warm baths at night are essential.

An attack of acute mania is altogether a different matter, requiring expert skill and prompt, unremitting vigilance and care by day and night. Some form of isolation and restriction of activity is necessary, of which that growing out of the routine daily life of a sanitarium is probably the best. At such

a place every source of irritation is removed; and experienced nurses provide for the peace and welfare of the excited patient. In other instances such an institution is absolutely necessary, to insure the safety of the patient and his friends—and is often a measure that is imperative in order to bring about a cure of the disease. Destruction of clothing and furniture, and the ever-present danger of accident and serious injury render home treatment the reverse of rational in many instances. A quiet and orderly routine often acts like a charm, and in itself does much to restore the patient's self-control. A woman subject to violent maniacal attacks, in which the excitement expressed itself in attempts to kill others and set fire to buildings, states that her first step toward recovery began with the restrictions growing out of the simple, systematic regulations of an institution, wherein her own will was subservient to the better judgment of a physician and nurse. This, she averred, was very helpful to her, and quickly brought a sense of peace quite unknown and impossible when at home among influences that had contributed more or less to the production of the disease itself, and served to intensify its symptoms.

The causes of mania are overwork, excessive muscular exertion, severe mental strain, emotional disturbances, moral or surgical shock, sexual excess, alcoholism, ill health and heredity. In cases of recurrent mania, or of the exalted stage of what is known as manic-depressive insanity, or of periodic maniacal excitement and epileptic mania, forms of mental aberration not considered at length in this paper, the hereditary basis is strongly marked.

Among a series of one hundred and eight recovered cases of mania that have been successfully treated at Stamford Hall, forty-eight are in men and sixty in women. The earliest age of onset is fifteen; and the latest sixty-eight and seventy, one case each. In twelve of the whole number of cases the disease appeared before the age of twenty. This wide range of age, from fifteen to seventy, gives the following averages: Among the forty-eight men the average age of onset is twenty-seven years; and among the sixty women it is about thirty. In forty-four of the whole number the attack came on between twenty and thirty, making fifty-six in which mania made its appearance before the age of thirty, this number constitutes nearly one-half of the entire list of recoveries. There are thirty cases recorded as coming on between thirty and forty;

nine between forty and fifty; only six during the next decade; and one alone occurring at the advanced age of seventy.

Among the forty-eight men who made good recoveries, forty-two were ill less than a year. Thirty-two of this number recovered within six months; and of the remaining sixteen, ten cases were under sanitarium treatment for a period varying from six months to a year. In the six others the attack lasted from thirteen to sixteen months, its average duration being fourteen months.

Of the sixty women who recovered from their attack of mania, fifty-four regained their health within a year. Among the fifty-four, thirty-two recovered in less than six months. There are six cases on this list in which the duration of the disease varies from one year to nearly three, the average length of time being two years and two months.

For men and women alike, three months is the average duration of the attack of mania in the one hundred and eight recorded cases. In the entire number of recoveries the attack of mania lasted less than a year in ninety-six, the average duration of the disease for these ninety-six cases being a little over one month. This favorable result is not so surprising as it at first appears. If expert care is secured at once, and a carefully planned routine is insisted upon, the severity of the disease and the length of its course can be materially modified. The recovery of these ninety-six patients in less than a year, and upon an average of one month, may be affirmed to be more or less directly due to early seclusion and rest, to the pure air and quiet of the country, and to early isolation from home and friends. The patients might have recovered under other conditions, but probably not so rapidly.

Among the forty-eight men successfully treated at Stamford Hall, the time occupied by the course of the disease presents certain points of interest. In one instance the disease ran its entire course in one week, the patient leaving the sanitarium perfectly well and as strong as ever. In another the attack of mania lasted two weeks. Lasting two months, there are eight cases; three months, nine cases; four months, six. Of five months' duration there are four cases; one, of six months; two, of seven; two, of eight; two, of nine, and three, of ten. One case only lasted just a year. There are five cases in which the disease continued over one year and less than two, being on an average about sixteen months in duration. In thir-

teen cases out of forty-eight, the attack of mania was cured in less than three months; and nineteen others among the men patients recovered in less than six months, making thirty-two out of the entire forty-eight who were ill less than half a year.

Among the forty-eight men, there are nineteen cases between the ages of twenty and thirty. In the next decade there are fourteen. Between forty and fifty there are two cases only, the attack occurring in each at the age of forty-two. From fifty to sixty there are four cases, the average age of onset being fifty-three. There is one case occurring at seventy, another at sixty. In one, the age of onset is not given. Beginning before twenty, there are six cases; two at sixteen, one at seventeen, and three at eighteen.

The civil condition among the men corresponds with that which would naturally be expected from the ages given. Twenty-six are single, one is a widower, and eleven are married. There is quite a wide range of occupation among them. There are about twenty distinct callings in all, though the learned professions are not represented. Two of the men are brokers, two musicians, and six are students. Following the vocations of editor and teacher, of each there is one case. Two of the other men are bookkeepers, six are clerks, three are salesmen, two are agents; and two are superintendents, occupying positions of trust and responsibility. Eight are farmers; seven are either artisans, laborers, or mechanics. Over one-third of the men who came under treatment are engaged in occupations that are either muscular or manual, in callings that demand physical rather than purely mental effort.

The alleged causes for the attack of mania among the men are overwork, traumatism, emotional disturbances, alcoholism, masturbation and excessive study. Overwork is given as the cause of eight cases. In ten the disease is said to be due to masturbation. In two, alcoholism is the alleged cause; and general dissipation is given as the origin of mania in one instance. In five the attacks have their origin in some form of traumatism, such as sunstroke, a surgical operation, a fall from a building, an eighty-mile bicycle ride in hot weather, and concussion of the brain, due to a fall from a bicycle. The emotional factors are grief, business excitement and anxiety, and disappointments of various kinds. There are seven cases due to such influences. Infectious disease is responsible in two in-

stances for mania, syphilis and grippe each producing an attack. In thirteen the origin is unknown.

In the recorded list of sixty women who recovered, there are five in whom the attack began before the age of twenty. The onset of mania in twenty-five others is given as occurring between twenty and thirty, making thirty cases, or one-half of the whole number, in which the disease appeared between the ages of fifteen and thirty. Among the women there are sixteen cases between thirty and forty; seven during the next decade; and five in the one following. Between sixty and seventy there are but two cases, one at sixty-five and the other at sixty-eight. In this special series there are only fourteen cases out of sixty in which mania appears after forty. Over two-thirds, forty-six cases, are persons whose attack of mania came on before the fourth decade.

The average duration of mania in these cases is three months. The exact duration in weeks and months is as follows: In one case, the attack lasted a month; in another, five weeks; and in a third, six weeks. Four cases are recorded as of two months' duration; nine, of three months; ten, of four months; and in eight the attack continued five months. There are seven cases of half a year's duration. Four lasted seven months; six, eight months; one, nine months; and five, ten months. Lasting from one year to two years and ten months, there are five cases, the average duration of the attack being one year and eight months.

The civil condition of the sixty women is as follows: Twenty-six are married, one is a widow, one is divorced, the condition of two is unknown, and thirty are single. Their occupations are for the most part connected with the household, or with the usual outside work that women undertake to earn a livelihood. Four are housekeepers, twenty-six are housewives; six are domestic servants and assistants; three are teachers; three are stenographers; four are factory operators; one is a bookkeeper; one a dress-maker; one an actress; and ten are without occupation of any kind.

The alleged causes of the attack of mania given by the friends of the sixty women patients include physiological causes, emotional crises, protracted strain, physical ill health, overwork, excesses, and undue fatigue. Two cases follow an attack of typhoid fever, one an attack of malaria, and another is a sequel of grippe. There are ten cases in which the origin is

ascribed to physical ill health alone. In nine, the mental disease is set down as due to physiological conditions. Four to childbirth; two to the nervous disturbances of the menopause; one to the checking of menstruation; and one to pregnancy. Nine times the alleged cause is overwork; and in four cases it is over-study. One case is due to alcoholism; and in two heredity is given as the cause. In six the origin of the attack is unknown. Ten cases are said to have their origin in emotional disturbances. Four of these are ascribed to domestic troubles, three to disappointment in love, three to excessive religious enthusiasm, and one to fright. In all these cases, forty-eight men and sixty women, there has been no report of any return of the mental trouble.

The aim of treatment is to calm undue restlessness, to induce sleep, to improve general nutrition, and to restore the balance of waste and repair. To this end, all the conditions conducive to physical health must first be provided, such as light, fresh air, perfect cleanliness, an abundance of appropriate food, together with rest, and judicious exercise when the time comes for its use. The appetite may be voracious and still no gain take place in weight. Cheerfulness may transcend all bounds, yet sleep continue to elude the alert and eager patient in such dire need of the rest and refreshment that it brings. To put it briefly, mania may be said to be characterized by boisterous actions, by increased secretions and excretions, and by general loss in bodily weight. It is a condition of altered function and general exhaustion, due to molecular disturbances not yet capable of demonstration by any known method or tests; and requires for its cure, repose, sleep, food in excess of the ordinary amount needed in health, pure air and absence of all irritation and annoyance.

When some form of mania is present, the erratic conduct and eccentric speech of this exalted state inspire fear and dread in the patient's family; and a doubt as to ultimate recovery is nearly always present, whether expressed in words or not. Companions and friends are without security and comfort, never knowing what is going to happen next. The sudden and violent character of all the symptoms, especially in acute mania, its noise and tumult, its constant movement and restlessness, often render the patient's condition in appearance far more serious than it really is. This adds to the perplexity of the situation and to the burden of his well-ordered care at home.

In melancholia, on the other hand, friends who are responsible for the patient's welfare are inclined to blame the sufferer for what seems to be lack of self-control and energy for work. In both instances the right kind of harmonious atmosphere is impossible because no one is at ease; and the even tenor of active, routine care is disturbed by changes and experiments due to the general uncertainty that arises from lack of experience in mental disease. Without doubt, a certain number of mild cases do well at home, recovering in a reasonable time if properly nursed, generously fed at intervals, and given the remedies that special symptoms call for. Others do far better in a sanitarium, away from the irritations of family cares, from everyday surroundings, and the over-anxious solicitude of friends. Often in cases of mania treated at home, just as in melancholia similarly placed, a most trying and altogether unnecessary strain is put upon the family, without any commensurate good to the patient. While it is sometimes almost impossible to persuade relatives that a man or woman suffering from melancholia is in urgent need of skilled care by day and by night, they believing the victim to be only down-hearted and gloomy, the difficulty of impressing the truth in regard to mania is of a distinctly opposite nature when the disease happens to be mild in character. Herein lies an element of danger. Because the degree of illness is slight the gravity of its nature may be unrecognized. The more violent the attack the more rapid, generally, is its cure. The chronic form of mania is most frequently preceded by acute mania; yet, there are cases in which it follows the sub-acute form of the disease, or exists as a continuance of a very mild attack that never improves to any appreciable extent. The younger the patient the greater is said to be the danger of periodic alternation, remission and relapse. Hence the extreme urgency of well-ordered sanitarium treatment and care for the boy or girl who succumbs to a first attack. An unwise attitude of friends too often militates against cure, sometimes defers it indefinitely. As soon as the patient seems stronger, becomes more quiet, sleeps well, and appears more or less rational, with the best intentions in the world, relatives are too apt to urge the patient's return home, though recovery is still distant, and further improvement not necessarily assured. Whether for business reasons or merely from the wish to give pleasure, this is at times a fatal mistake, and always one that is serious in its consequences.

To limit the restless moving about and general exaltation is one of the first indications in the rational treatment for unrestrained activity tends to increase the excitement. Sometimes in mild cases moderate work and well selected physical exercise will do this, household duties or the affairs of garden and greenhouse, the care of pet animals and live stock, together with outdoor games, walks, riding and driving. These methods in well selected cases are all curative measures, especially in patients who are strong physically and naturally robust. But where there is great physical exhaustion, distinct depression of the heart's action, and increasing emaciation, rest and not exercise is at first required. The anæmic and the weak must not be set at work. They need to be soothed and spared all manner of fatigue, both of body and mind. One of the best ways to stop the ceaseless and meaningless movement is to keep the patient in bed. In many acute cases of mania the Weir Mitchell plan of rest treatment gives the best results. The patient is put to bed in a quiet room, preferably in a strange place and away from home, fed from three to seven times a day, given daily massage, and allowed to see no one but the doctor and the nurse. A modified rest-treatment serves a good purpose in certain instances, the patient rising in the morning at ten or eleven o'clock, resting in bed two hours during the day, and retiring for the night shortly after supper.

Whatever tends to improve nutrition and to increase metabolism is of service in the cure of mania. The general use of electricity in all forms of lowered vitality suggests it as a remedial agent in this special form of mal-nutrition, and of lowered muscular and nerve force. In well selected cases, at the proper stage of the disease, static electricity is of distinct value. Electric currents of high frequency and high potential, when applied generally by auto-condensation or conduction, seem quickly to increase the hæmoglobin of the red corpuscles, and thus aid in removing the anæmia that is often present.

When there is very great excitement, prolonged warm baths may be needed. The wet pack or full bath at a temperature of 65° to 105° Fahrenheit is valuable in such cases, to allay motor restlessness and induce sleep. The physical condition improves, the appetite increases, and with it the bodily weight. Under the influence of modern hydrotherapy there is a rapid and marked change in general muscular and nervous tone.

The graduated bath is one form of water that is of great ser-

vice in the treatment of mania. Begun at a temperature of 95° F., there is a constant steady reduction of temperature until the bath thermometer registers 65° just before the patient is removed from the water. A cold compress is kept on the head during the bath; and as the cooler degrees are reached toward the end, friction of the surface of the body is kept up by the hand of the attendant. At any stage, the bath is promptly terminated if the pulse or respiration show that its effect is unfavorable. In the first bath, it is sometimes best to reduce the temperature of the water only ten degrees, from 95° to 85°. Each bath following may be reduced five degrees lower, beginning always at 95°. Two baths are sometimes given during twenty-four hours, each lasting thirty minutes to an hour or more. There is no shock to the patient, because the ten or twenty degrees of change in the temperature of the water is so slowly brought about.

Water to drink is also a necessary adjunct. In extreme cases of violent excitement, where collapse seems imminent, stimulants like whiskey, brandy, digitalis or strychnine may be needed. Insomnia when prolonged and intractable to simpler measures, may demand the use of some hypnotic, hyoscyne, sulfonal, trional and veronal being the safest and the most useful. But the main dependence to induce sleep is the use of water and fresh air together with well-ordered rest and appropriate food.

Among the remedies most frequently indicated in mania are belladonna, stramonium, hyoscyamus, lachesis and veratrum viride. Others which have a less extended sphere of usefulness are agaricus-muscarius, cannabis indica, platina, spongia and veratrum album.

PERSONAL OBSERVATIONS OF THE METHODS OF TREATING TUBERCULOSIS IN EUROPEAN SANATORIA.

BY U. A. SHARETTS, M. D., COLORADO SPRINGS, COLORADO.

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MORE than twenty centuries ago medical and lay writers recommended residence in suitable climates and good living for consumptives. Galen, Celsus, Pliny and many others be-

fore and after them advocated pure air, either sea or mountain, sunshine, pine forests, the milk cure, etc. So down the ages from the dawn of medical history to the present day, physicians have said, give the consumptive pure air and nourish him well. Since these are the cardinal principles in the treatment of the tuberculous to-day one might appropriately ask, "Is there in reality anything new in the treatment of consumption?" Notwithstanding the fact that the fathers in medicine and many of their progeny advised climatic, hygienic and dietetic treatment for this fell disease, yet in 1867 Ullersperger wrote that there were barely two hundred cases of cure recorded since the time of Hippocrates—scarce ten a century. Yet to-day the world claims many hundred cures each year. There must be, therefore, some new application of old theories, some definite attention to details to account for this greater success in recent years. Although much has been written on this subject, the rank and file of the profession have much to learn. This is not surprising when it is remembered that only a few years ago those in the front rank were little further advanced than were the ancients. But six years ago, 1898-99, the writer was advised by the leading physician in the Adirondacks—a man often quoted as the leader, in this country, of the modern methods of treating tuberculosis—to ventilate his room at night by raising the lower window sash on a broad board so that the air could filter into the room between the upper sash and the lower. By direction of the same authority, a near neighbor, a very ill woman, remained all winter, day and night, in a room the only ventilation of which was by means of three holes, each three inches in diameter, cut through the lower edge of the outer window sash. The windows being double the inner sash was pulled down at the top to allow the air that came through the holes below to pass over into the room. But the profession, since that time has become better acquainted with the methods that have been in successful operation in foreign sanatoria for years past. Much, however, yet remains to be gained by continued study of this subject.

During an extended course in some of the leading sanatoria for consumptives in Europe, the writer had opportunity for observing the various methods of treatment as conducted in the different institutions. While most people, lay as well as professional, understand in a general way the modern methods,

yet it is only by an intimate acquaintance with and a rigid application of the details thereof that satisfactory results are obtained. None know this so well as those who have had most experience. Dr. Walther, of Nordrach, speaking of this, expressed his disapproval of short visits to his institution by physicians and further said: "They come here, spend a few hours in looking about, then say, 'I see the plan, it is pure air, exercise and forced feeding;,' to which I reply, 'Yes, you know it all, you get in an hour what it took me twenty years to learn.' " At the risk therefore of being perhaps a little tedious, I propose to go somewhat into detail in dealing with what I regard the important features of the subject under consideration.

Falkenstein sanatorium is located in the Taunus Mountains in Germany, ten miles from Frankfort, in a valley which slopes in a southeasterly direction and overlooks the valleys of the Rhine and the Main. The location is an ideal one, being well protected from wind by the surrounding hills, a very important feature. There is perhaps no more complete building for the purpose in existence to-day, but we will pass over details in this particular; we are after treatment. Suffice it to say that the company has plenty of money, beautiful grounds, and an abundance of help and attendants. On entering the sanatorium the patient is examined by the staff of physicians, three or four, and an accurate record is made of his case, together with a map of his lungs, right, left, front, back. He is then assigned to a large airy room, the walls of which are so constructed that they may be kept in an aseptic condition. If the patient has traveled far or is weak and feverish, he is put to bed and kept there until rested and the fever is reduced. During this period in bed, he is encouraged to eat as much as possible. Milk, broths, eggs and meat of course are given, but all other forms of food are furnished and the patient is earnestly advised to eat heartily of this mixed diet. During this time, he may gain in weight; not infrequently many pounds are added by the time he is rested, the fever is reduced and he is allowed to get out of bed. I remember one lady, an American, who was very thin who gained so much in weight and size by a few weeks of this treatment that when she got up, finding her clothes so tight she could not adjust them, cried bitterly, believing she had a tumor.

If the condition is such as not to require this preliminary

stay in bed, the treatment is as follows: Early in the morning a rubber, not a professional masseur, goes to the room and, the patient in bed, rubs him down with alcohol and water in various proportions according to circumstances, using a bath towel mitten. The alcohol is gradually reduced as the patient improves and finally plain water is used. When this stage is reached, the subject gets out of bed and a large, cold wet sheet or towel is thrown over him and he is rubbed vigorously for a minute; the wet towel is then replaced by a dry one and he is again rubbed, after which he gets into bed and remains there until sure of reaction of the circulation. Breakfast is from 7.30 to 8.30 and consists of bread or rolls with butter and honey, coffee, or chocolate and milk—the usual Continental breakfast.

He now goes out on the piazza and takes his place in a well-upholstered reclining chair. The position is semi- or two-thirds recumbent. At 9 the physician visits him, notes his general condition, temperature, etc., and makes any suggestion necessary. If he is able he may now take a short, slow walk. Note the fact that the walk is slow, always slow. At 10 o'clock the patient goes to the dining room for second breakfast which consists of the same articles as the first, minus the coffee. If the continued use of much milk becomes repugnant to him, although this is usually overcome by persistence, he may occasionally take instead *gersten-schleim*, a very nourishing soup devised by Dettweiler, consisting of broth from cracked veal bones, barley, butter and eggs. The patient then returns to his chair where he remains until dinner at 1 o'clock. If able, however, he may take a limited walk. Dinner is served in courses, the following being the translation of a menu card and represents an average mid-day meal: Tapioca soup, carp with tartar sauce, venison with potatoes and cranberries, sausage with carrots and peas, chicken with lettuce and stewed fruit, lemon pudding, apples and nuts, coffee. All varieties of game, fish, fowls and meats are used; nothing is despised from raw ham to the *pâté de fois gras* of the epicure. The idea is to tempt the appetite of the most capricious. After coffee, which is served in the winter garden, drawing and music rooms, the patient again repairs to his chair where he remains until 4 P. M. During this time he may read or sleep, but must not talk or disturb his neighbor. Just before 4 o'clock he is again visited for a moment by a physician. At 4 he is served in his chair with milk or *gersten-schleim*, after which he must

remain there or he may take a walk if the physician permits. Supper at 7 P. M. consists of one course of hot meat with potatoes or other vegetable, and one course of cold meat with salad; bread, butter and milk as usual. The butter is made from sweet cream and is unsalted, and patients eat it in large quantities. The milk furnished from the dairy belonging to the institution is strained through double layers of felt and is served hot or cold. No one can justly complain of the cuisine. The food is well prepared and nicely served, and in great abundance and variety. This together with the fact that meals are served in courses enables most patients to eat well; the force of example likewise counts for much. A light wine is prescribed as a routine practice "to help the patient eat." Each person has a linen table pocket in which his napkin is kept; all dishes, knives, forks and spoons are sterilized after meals. After supper, the patient once more returns to his chair, where he may remain not later than 10 o'clock, though he may retire earlier if he likes. Patients are forbidden to return to their rooms after leaving them in the morning until retiring time at night. Some patients take a glass of milk before retiring. Variations are made in the management of cases according to individual necessity, thus; ladies do not receive the morning cold rub during the menstrual period; cold morning shower baths are given to those well advanced toward cure; the nose and throat are carefully treated, complications are well looked after; the amount of exercise varies from fifteen minutes to two or three hours a day, etc. Every patient receives a careful physical examination once a month. All who expectorate must carry a pocket sputum flask; the use of handkerchiefs or cloths to receive the expectoration is *sternly* prohibited here as in all other institutions. There are numerous cuspidores in the building and about the grounds and no one is permitted to expectorate on the ground. During six months I saw but once a patient violate this rule. No brooms are allowed about the institution; the bed room floors are wiped with a damp cloth every morning, and the floors of the halls and public rooms are treated in the same manner several times daily. Antiseptics are liberally used. Fresh air is constantly admitted all through the building. Ladies must wear dresses that do not touch the floor. All are expected to sleep with wide open windows. An important point in ventilation is the fact that windows open in halves from top to bottom like shut-

ters, the so-called French windows. Each patient takes and records his own temperature every three hours as long as it remains above normal. Patients if well enough are sometimes allowed to spend a day or a night away from the institution, but absence without permission means dismissal. Rules must be obeyed, but when patients become accustomed to the system it is not irksome and one seldom hears of a reproof being administered.

The above is the routine course of management at Falkenstein and has come to be known as the Rest Cure and herein it differs somewhat from that of Goerbersdorf and Nordrach.

Having dealt pretty fully, yet as briefly as is consistent with circumstances with the details of treatment as carried out at Falkenstein, I will not go into the minutiae of the treatment at Nordrach. In a general way the same line is followed at all sanatoria, but there are certain points of difference and these I wish to point out.

Years ago Dr. Walther took his wife to Falkenstein for treatment. She was rejected as incurable. The Doctor would not accept the verdict but took her to the Black Forest in Germany, where he secured an unused glass factory in the north end of a valley opening to the south. Here, after three years, Mrs. Walther was cured. Such was the birth of the now famous Nordrach Sanatorium, located near a small village of the same name. Dr. Walther, in addition to the factory referred to, secured a few adjoining dwelling houses in which he placed patients as time went on, and finally built a long, narrow building, embodying his ideas of the proper construction of a sanatorium. This building, while lengthy, is only one room and a hall in depth and is so situated as to secure the greatest amount of sunlight. A hall runs the full length of the building in the rear on each floor. Opposite the door of each room is a window in the hall and there are from two to four windows in a room, which are open all the time, likewise the entrance door with its large transom and the window opposite in the hall. This secures constant circulation of air and this is what Dr. Walther wants. He tersely puts it: "Stagnant water, stagnant air, same thing; draft is what we want."

The dining room is also a long, narrow structure, the sides of which are made up chiefly of tall French windows. These windows are open on both sides of the room all the year around; only on the worst days of winter or during a storm

are they closed on the windward side. The patients therefore eat in what is practically an open shed. The diet is similar to that at Falkenstein though the bill of fare is perhaps a little less elaborate. One point of difference is that meat is served at breakfast. Three meals are taken a day and great stress is laid upon the amount eaten, but nothing is taken between meals. Beer and wine are allowed, but not generally prescribed. In discussing this question with the Doctor I remarked that I thought I had noticed that the free use of spirits was conducive to hæmorrhage. His reply was, "That may be so; I do not prescribe it, and I set the example of abstinence by not using it at table myself." An hour's rest, reclining, before meals is insisted upon so that patients do not go to the table in a state of fatigue. Smoking in the open air is allowed if it does not induce cough. Exercise is regulated by the patient's temperature which is taken per rectum four times daily as follows: Immediately on waking in morning, directly after morning walk (if resting at 11.30), on completing afternoon walk (if resting at 5.30) and ten minutes after retiring, from 9 to 10 P. M. If morning temperature is regularly below 98.4 a short, very slow walk is prescribed. The out-going walk should be a gradual ascent at snail's pace. Dr. Walther thinks this expands the lungs and strengthens the heart. The return walk should if possible be a descent. If the temperature per rectum after exercise is 100.4 the walk has been too long and absolute rest must be observed the remainder of the day. If the next morning temperature is right a shorter walk than that taken the previous day is prescribed.

When practice shows the temperature after the walk well below 100.4, if no great fatigue is felt, a short stroll may be taken in the afternoon, governed always by the temperature obtained on returning. If the morning temperature is the slightest fraction of a degree above normal, absolute rest in bed is enjoined and the same amount of food is taken as when the patient is exercising. The greater the amount of food taken, the more rapidly is the fever reduced. As the patient improves the walks are gradually lengthened until five, ten, fifteen and even more miles are covered in a day. Cold shower baths are taken by many persons, but the time of this bath is left to the patient's own election.

Time forbids further details, but I desire to call special attention to the essential points of the Nordrach régime:

First. Great stress is laid upon the quantity of food taken by the patient. So important indeed does Dr. Walther consider this feature of the treatment that he personally superintends the amount of food taken by all patients. Loathing of food and even nausea are not allowed to interfere with the meal; it has been found that perseverance in eating develops the power of digestion in the majority of cases and finally overcomes these disagreeable features. Many who enter the institution prejudiced against milk and other foods soon find they can take them and with advantage. While the subject of nutrition receives great attention at all sanatoria, yet it seems to me that at Goerbersdorf and Nordrach the strict supervision by the physicians of every meal and the urgent insistence, amounting almost to compulsion, induces patients to eat more than they will if left to decide for themselves with only the direction to eat all they can. It will be observed also that while at many sanatoria food is given five and six times daily, at Nordrach three meals only are served with nothing between; the idea being to give the digestive organs a time for rest after labor. A meat breakfast is served here, which is not the custom at other sanatoria on the Continent.

Second. The open dining room. When we consider that at most institutions the patients sit in a closed room for three hours a day, a window open here and there, or fresh air forced into the room through a small aperture by some special device, and then compare the same with a dining room whose sides are open, permitting a free circulation of fresh air continually, the advantages of the latter are so apparent as not to require comment. It might be urged that patients take colds thus exposed, but experience proves that under the Nordrach training such is not the case.

Third. No rooms for patients to congregate and breathe each other's poison. While nearly all sanatoria have their entertainment halls, billiard, music and reception rooms or winter gardens, Nordrach has none. There is absolutely no inclosed place where patients may assemble and waste time. It is in such places that patients contract the disease—they will not get well in them.

Fourth. No large open loggias or piazzas where patients may sit and talk and entertain or weary each other all day long. Dr. Walther believes that much talking fatigues the patient whose respiratory organs are diseased. He also be-

lieves that indulging in games as cards, chess, dominoes, etc., is tiring to a frame worn by disease. Gibson, a Nordrach man, says: "There should be no lying-out verandas built on a sanatorium they only conduce to lazy habits in the patients and they do anything but put them in the condition of 'athletes in training.' " There are, of course, plenty of seats and hammocks in the open where at certain times small numbers may collect and talk, but they do not spend hours at a time daily in this manner.

Fifth. Scientific regulation of exercise. This is a very important point. At many sanatoria when the patient receives his monthly examination he is told that he may walk ten, twenty, thirty, sixty minutes or more daily. At various intervals during the month he is told that he may walk more or less than the above stated time according to his general condition, but no accurate supervision is kept of the result of his walking. Here an exact gauge is kept upon each day's walk. The amount of fuel burned, of strength consumed, is measured by the deep body temperature as previously described, and the next day's exercise is guided thereby.

Thus it will be observed that the treatment at Nordrach is a combination of the rest cure and exercise, both of which are regulated by the patient's general condition, but especially by his temperature. Over-fatigue which means a rise in temperature is guarded against. The temperature is, therefore, always the guide for the day's work.

The above lines of treatment may be objected to because of their strenuousness, but no great object in life is obtained without effort. If health is worth having, it is certainly worth all one's effort to regain it when lost.

Goerbersdorf, the parent institution under the renowned Brehmer and his successors has been for years conducted much on the same lines as Nordrach, but I think Walther has improved on Brehmer's treatment in some of the points above mentioned, especially in the open dining hall, the absence of rooms for congregating and the accurate regulation of exercise.

Leyzin, in the Swiss Alps, is admirably located, has fine buildings, well equipped and the table and general management are good. The plan of treatment is so like that in the average sanatorium that there is nothing special to point out except that the life led there is less rigid. From observations

made during a three months' stay the conviction was forced upon one that while they are doing a good work, yet taking into consideration the fine climate, high elevation, and other advantages, better results would be obtained if the Nordrach methods were adopted.

It is not within the compass of this paper to discuss the much-mooted question of altitude. It is worthy of note, however, that all of the above named institutions are located either in hills or mountains at altitudes ranging from 1,300 to 4,750 feet. Altitude for consumptives is much in favor and it would seem not without reason. If high altitude increases the amount of hæmoglobin and the number of red corpuscles and if there are less native cases of tuberculosis in high than in low elevations, it seems reasonable to suppose that a patient having contracted tuberculosis in the low lands will multiply his chances of recovery by going to the highlands.

In conclusion, I must add a few words as to results. In the foregoing, I have presented the methods of treatment employed in some of the oldest and best known institutions. Far be it from me to detract from the merit of any of them for all are earnestly engaged in a great work and are accomplishing a vast amount of good. There being, however, some points of difference, it is but fair to inquire as to which gives best results. Statistics are of value but they are often misleading, so I will not quote them. In forming an opinion as to the percentage of cures, the first point to ascertain is the class of cases admitted. Most sanatoria admit only cases in the first and second stages and a distinct effort is made to exclude incurables. This is not the case at Nordrach. Dr. Walther believes in "the open door" and patients are admitted in the order of their application no matter what their condition. The Doctor considers it a great injustice to exclude advanced cases, as under proper management many good cures are made in severe cases. Notwithstanding the fact that all classes are admitted I have never seen any statistics that gave Nordrach a lower percentage of cures than were accredited to the better class of other institutions. I have, however, seen statistics that gave it a higher rate of cure than others. James Arthur Gibson, a Glasgow chemist, who had been cured at Nordrach, in a series of ably written articles in *The Nineteenth Century*, January, March and October, 1899, reported a very high rate of cure at Nordrach. So high indeed were his percentages that

he was severely criticised, but in his replies he presented figures and alleged facts which well sustained his assertions. Candor compels me, after a careful investigation of all obtainable data as well as several years spent in and about sanatoria in Europe and America, to declare my firm belief in the superiority of the methods employed by Walther, of Nordrach, in the Black Forest, Germany. In this connection it may be well to recall the humble origin of this institution. The success which it has achieved proves that ability on the part of the executive officer counts for more than money and fine buildings. The two go well together, but no matter how richly an institution is endowed, unless the physician in charge is a thoroughly trained, able man with a mental bent adapted to the work the results will be but little better than those obtained in an ordinary hotel.

ACNE.

BY W. W. KNOWLTON, M. D., CAMDEN, N. J.

IN selecting Acne for your consideration this evening I did so, thinking that one of the common, everyday diseases of the skin would be of the most practical value to you. Acne is met with and described by different dermatologists under various forms and names, Acne simplex, Acne disseminata, and Acne vulgaris. In looking through the different text-books on dermatology, you find mentioned, Acne papulosa, Acne indurata, Acne cachecticorum, Acne scrofulosa, etc., which might lead you to infer that these names represented distinct diseases. They are, however, nothing more than variations of Acne vulgaris or the common Acne.

Acne vulgaris may be described as an inflammatory disease of the sebaceous and pilo-sebaceous glands, characterized by the development of papules, pustules, or tubercles or a combination of these lesions, appearing for the most part upon the face, neck and back.

Acne vulgaris is a disease of youth and early adult life, appearing, as it does, about the time of puberty and lasting until 25 or 30 years.

It may be seen at any age, but is exceedingly rare after forty. Both sexes are attacked, and it is seen in all grades of society.

It occurs most frequently upon the face, neck and back, but any portion of the body may suffer, excepting, of course, the palms and soles. The disease may be acute, but is usually chronic. It occurs in all grades of severity, from a few discrete papules scattered here and there over the face, to a large number of variously sized papules, pustules, and tubercles, closely crowded together over the face, neck and back, and occasionally the chest and extremities. The disease is usually associated with comedo and seborrhœa, in fact, the great majority of Acne lesions spring from a pre-existing comedo. The comedo being, as you all probably know, what the laity term black heads.

The causes of Acne are twofold, one in the skin itself and the other in the system generally. In other words, the causes are local and constitutional. The local causes of Acne are usually an overactive sebaceous system, and a moderately thickened skin. As brunettes are apt to have thicker skins and more active glands, the disease is more frequently seen in them than in blondes, whose skins are generally thin and fair. In young men, the growth of the beard and the production of Acne are closely connected. With a plentiful growth of hair on the face, there is seldom much Acne, while, on the other hand, where the face long continues bare, or the growth is scanty, Acne is quite common, due, probably, to a functional disturbance of the hair-producing apparatus. A want of tone in the *erectores pilorum* and in the involuntary muscles of the skin generally may induce Acne, because the regular emptying of the gland ducts, on account of their contraction, is inefficiently accomplished.

The general causes of Acne are numerous and varied. Puberty plays an important role in the production of Acne. It is at this period that the glands of the skin and the hair-producing apparatus become especially active, and if at this time there are present any constitutional disturbances liable to induce Acne, plus a local predisposition to the disease, it makes its appearance. The sexual system also plays an important part in the production of the disease, particularly in the female, where I find that in the majority of cases there is some uterine or ovarian trouble; and in eight out of ten cases of *Acne vulgaris* in females which I have treated, I have found that there was an aggravation of the trouble at each menstrual period, the menses being irregular both as to time and quantity.

Masturbation is looked upon as a cause of Acne, and so it is

when there is a predisposition to the disease, in so far as it lowers the general tone of the system. In adults the incomplete performance of the sexual act, relatively to both parties, has been shown by Piffard to be an occasional cause of Acne, though seldom discovered. Gastro-intestinal troubles are also frequent causes of Acne, and in a large majority of cases, particularly in males, dyspepsia and constipation will be found to be the exciting cause. Anemia, mental and physical exhaustion, in fact anything that tends to place the constitution below par may cause Acne. There are occasionally cases in which a most careful examination fails to reveal any cause; but, as a rule, there will be little or no trouble in finding some one or more of the causes above enumerated.

The diagnosis of *Acne vulgaris* is usually easy. The period of life, the situation and character of the lesions, and the absence of subjective symptoms, so far as the skin lesions are concerned, are sufficient to prevent a mistake. *Acne vulgaris* differs from *Acne rosacea* in that *Acne rosacea* occupies the middle of the face, while *Acne vulgaris* predominates on the sides of the face. *Acne rosacea* patients are older, as a rule, and there is a hyperæmia of the skin generally, over the area involved. Dilated and tortuous vessels coursing over the diseased area are also characteristic of *Acne rosacea*.

There are two other diseases that might be mistaken for Acne, namely *sycosis non-parasitica* and *papulo-pustular syphiloderm*. *Sycosis non-parasitica* is a disease of adult life, occurring only after the beard is grown, and it is due to pyogenic infection of the hair follicle. Acne, as a rule, occurs earlier in life. *Sycosis* is confined to the hairy portion of the face, while Acne occurs on the non-hairy parts, as well as the hairy.

In *papulo-pustular syphiloderm*, in the great majority of cases, we have other manifestations of the disease to help us out, such as mucous patches about the mouth, and adenopathy, and very often the eruption is scattered over the body generally. In Acne, the pustules are as a rule acuminate and covered with smooth epidermis, and there is no tendency to the formation of crusts. In syphilis, the pustules are flatter, and there is a tendency to crust formation and ulceration.

The prognosis is important. Always be guarded. Tell them that so far as the existing lesions are concerned it is very good, but that the greatest difficulty will be to prevent the formation of new lesions.

Treatment.—The causes of Acne being two-fold, local and constitutional, and as it is necessary to remove the causes in order to cure the disease, it is very evident that our treatment must be both local and constitutional. Every case should be thoroughly investigated, in order to determine the cause, not merely the condition of the patient at the time, but his history, environment and mode of life in the past as well as the present. After carefully weighing the evidence obtained, our endeavor must be to correct that which is faulty.

In females, where the cause of Acne is so frequently some uterine trouble, it is often necessary to give local treatments as well as the indicated remedy. In persons suffering from dyspepsia, it is necessary to correct their diet. The patient should be impressed with the necessity of eating slowly, and at regular intervals. Where there is constipation, try to have them form a habit of having a stool regularly each day. Avoid as much as possible the use of cathartic pills, relying upon natural mineral waters and a good homœopathic prescription.

The causes of Acne being so numerous and varied, almost any remedy in the *materia medica* may be called for. I will enumerate a few of the drugs which I have found to be most frequently indicated and which have done good service. In females suffering from Acne, where some uterine trouble is the cause, I find such remedies as cimicifuga, collinsonia, graphites, pulsatilly, sepia, sabina, bell., lachecis, sanguinaria and sulphur are called for.

Graphites has among its provings: A pimply eruption on the face about the time of the monthly period.

Bell. is particularly indicated in pustular variety, and especially when the lesions are on the back. It is also of service in the papular form of the disease.

Sanguinaria produces an Acne on the face, particularly in women who have scanty menstruation and are subject to irregular distribution of blood.

Puls. I find to be frequently called for, as it covers many of the uterine as well as the stomach symptoms so frequently complained of by these patients.

Where dyspepsia and constipation are the causative agents, such remedies as arsenicum, bryonia, alumina, carbo. veg. lyco-podium, nux vomica, calc. carb. naturm. mur. Ignatia, puls. sulph. iris, ipecac and sanguinaria come into play.

In Acne from sexual excesses, calc. carb. pros. acid and sulphur are to be considered.

In the scrofulous and cachectic where we are apt to have the indurated and pustular forms of *Acne*, *carbo animalis*, *sulph. calc. carb.*, *psorinum silicea* and *ars. jod.* are a group of remedies that will serve you well.

When I can find no constitutional symptoms upon which to base a good prescription, I generally prescribe one of the following remedies: Iodine, bromine, iodide of *ars.*, *kali hydudicum* or sulphur.

The local treatment of *Acne* is of the utmost importance, and, as I said a few minutes ago, the existing lesions are comparatively easy to remove. As there are several varieties of *Acne vulgaris*, and as the disease is exhibited in all grades of severity, the local treatment must vary. In looking over the treatment of *Acne* in any text-book you will find a great array of formulæ both in ointments and lotions. If you will study these prescriptions carefully, you will find that sulphur, or one of the sulphur compounds, or substances containing sulphur greatly predominate. I have used various local applications, and my experience has taught me that it is only necessary to have a few formulæ to accomplish all that is desired, so far as the removal of the lesions is concerned.

As most all *Acne* lesions spring from a pre-existing comedo, our attention should first be directed to the removal of these lesions. Knowing that the comedo is due to the retention of sebum within the sebaceous follicles, it is our duty to first remove this sebaceous plug, and then endeavor to restore the gland to its normal condition. Where there are only a few comedones, the quickest and best way to remove them is by a comedo extractor; but in many cases the lesions are so numerous that it is impracticable to remove all by this method, and it becomes necessary to employ other means, removing only the largest with the extractor. In all cases of *Acne*, whether comedones are present or not, I have the patients bathe the affected surface frequently with water as hot as they can bare, or I have them steam the face. This serves a two-fold purpose, it stimulates the skin, and if comedones are present, and they are in nine out of ten cases, it softens the plugs and aids in the process of removal.

I then have the patient give the affected surface a thorough washing with soap and water, and follow this with a good rubbing with a crash towel. Now as to the soap to be used. Where the skin is more or less thickened I generally recom-

mend that they use the tincture of green soap. This soap I find to be of great value in removing the comedones; it also stimulates the skin. In cases in which I think the green soap will be too severe I tell them to use any good soap, preferably a medicated soap and particularly sulphur soap. No matter what soap is used the skin should be thoroughly rinsed off after the washing.

In order to tone up the glands and the skin in general, in addition to what has already been done, I recommend that they have the skin massaged. This stimulates the arectores pilorum and the skin structures in general, and is a great help in restoring the skin to a healthy condition.

In papular Acne of the face, where the lesions vary in size from that of a pin's head to that of a pea, and where there is but little greasiness, I generally use what is sometimes termed the *lotio alba*, or compound zinc sulphide lotion. This lotion is made up of zinc sulphate, potassium sulphide and rose water. I have them apply this lotion twice a day. It is well when prescribing this, or, in fact any of the sulphur lotions, to warn the patient that it is apt to make the skin feel puckered or drawn, and also that it may make the skin dry and rough, in which case I tell them to apply a little cold cream.

Where there are large indurated papules on the face, neck, or back, I prefer an ointment, and I find that the sulphur ointment in varied strengths acts well. In papular and papulo pustular Acne of the face, where the skin is more or less thickened and quite greasy, and where there is a tendency to rosacea, I generally use Kummerfeldt's solution. This is made up of—

Sulph. prae \mathfrak{z} ii, pulv. Camphorae grs. x, Pulv. Tragacanth grs. xx. Liquor Calcis and Aquae Rosea aa \mathfrak{z} ii.

In Acne where the skin is very greasy and there are many comedones and the skin has a dirty, unwashed appearance, I find the following lotion of service:

Sulph. prae \mathfrak{z} i Aetheris $\mathfrak{f}\mathfrak{z}$ vj Alcoholis ad \mathfrak{z} iv.

In pustular Acne, particularly where the lesions are small, I have had excellent results with the following ointment:

\mathfrak{R} Hydrang Ammonati grs. xx. Ungt. Zinci Oxidi \mathfrak{z} i. m.

The best and most scientific method of treating a pustular Acne is to puncture the lesions with a small bistoury, or with an Acne lance, evacuate the pus, and apply a little carbolic acid to the lesion. In some of the larger pustules it is nec-

essary to make more than one puncture, as these lesions are sometimes multilocular.

As I have said, there are many formulæ recommended for the treatment of Acne, but I have found a few sufficient to do all that is required. I have given you the best of them, according to my personal experience, and hope that those of you who have cases of Acne to treat will have equally good results as I have had.

HYPERTROPHY OF THE PHARYNGEAL AND FAUCIAL TONSILS AND THEIR TREATMENT.

BY D. W. HARNER, M. D., PHILADELPHIA, PA.

(Read before the W. C. Goodno Medical Society.)

HYPERTROPHY of the pharyngeal tonsil is commonly expressed as Adenoid Vegetations, which is a true hypertrophy of the lymphoid structures in the vault of the pharynx. This condition had been overlooked, notwithstanding its importance until 1869, when it was described by Dr. Myer; yet is it a frequent and noticeable disturbance. It has been found to exist in from five to nine per cent. of all children no race and no country exempt.

Its existence since historic times has been made probable by finding the characteristic facial expression indicative of it in various portraits from the middle ages, and even in some statues of antiquity.

The direct consequence of enlargement of the pharyngeal tonsil is obstruction of nasal breathing to an extent proportionate to the space occupied by the new growth, and hence inversely proportionate to the dimensions of the pharynx. Owing to the vascularity of the lymphatic tissue, its size is subject to fluctuations. An enlargement that would not be noticeable during the erect posture, might entirely prevent nasal breathing during the reclining posture, owing to the increased blood supply. The obstruction is always increased during sleep, due to the turgescence of posterior ends of turbinals. Still more noticeable is the obstruction when an acute coryza increases the congestion. The patient cannot sleep with mouth closed, although while awake they may be able to breathe through the nose, except in high degrees of hypertrophy. Secretions which occur cannot be blown from or through the nose, consequently are drawn back into the pharynx.

Enlargement of the pharyngeal tonsil betrays itself on the voice, which becomes dead, or non-resonant. You will find the same voice where there is obstruction of the nose from acute coryza or polypi. The interference with nasal breathing results in, thickening of lips, and sinking in of the sides of nostrils, which gives the child the appearance of a shortened upper lip, showing the teeth. This with the broad nose and open mouth gives the patient a very characteristic, stupid expression, this is increased by a dreamy look, due to the vascular fullness of the lower eye lid, causing a reduction of the lid aperture. In well marked instances the expression, as well as the voice suggests a positive diagnosis. In some marked cases you find a "V" shaped hard palate after second dentition, with the cuspids and bicuspid inclining inward.

Children suffering from adenoids are very prone to take cold; they get a fresh cold or an attack of nasal catarrh from slight exposure, which very often remains during the inclement season, or even longer. In this connection it might be well to remark that if you have a purulent secretion you will find some complicating inflammatory condition of the nose or pharyngeal tonsil itself, and is not due to the mere hypertrophy. If the adenoids are not removed, you may have a hypertrophic condition of posterior ends of turbinals, and probably septal overgrowth in the older cases. The ears suffer in a very large proportion of cases of adenoid vegetations. These ear complications develop so insiduously that they are very often overlooked. The most common and the least unfavorable, from a prognostic standpoint, is that of catarrh, limited to the Eustachian tube. More serious are attacks of purulent inflammation. Serous catarrh of the middle ear is not common in younger children, but not so rare at the period preceding and following puberty.

As a rule the ear involvement is due to acute or subacute inflammation, and not merely on account of the mechanical presence of the enlarged tonsil. The hypertrophy, however, is the important determining condition, without which the temporary coryza or pharyngitis would scarcely endanger the ear. While the ear affection yields to treatment, relapses are almost sure to occur unless the hypertrophied tonsil is removed. Hence neglect means lost or damaged hearing. A very common complaint of children with adenoids is cough due to frequent and often persistent attacks of bronchitis, following

acute nasopharyngeal inflammation. In other cases it may be a reflex disturbance, without any lesion in lower respiratory passages. Children with pharyngeal obstruction not only look stupid, but often are so. They find it difficult to concentrate their attention. The mind is sluggish, termed (*Aprosexia*). They complain of pain in the back of the head; difficulty in the use of the eyes, fatigue, strain, etc. Farsightedness and astigmatism of such a degree as to necessitate glasses has entirely disappeared, and glasses discarded after pharyngeal operation, which of course does not change the structure of the eye.

The interference with nasal respiration disturbs sleep. Such children are restless at night, toss about or wake with nightmare or frightening dreams; enuresis or bed wetting is not an uncommon occurrence; this generally ceases after operation. We often have enlarged cervical glands, and in high degrees of pharyngeal obstruction, stunted growth and insufficiency of weight. After operation the change is so great that one cannot help but attribute the impaired nutrition to the blocking of the pharyngeal space. While the enlargement of pharyngeal tonsil is an affection of childhood, it does not necessarily disappear at puberty; it may last during middle life; however, the pharyngeal space grows during the second decade of life at a faster rate than the adenoid tissue, and the latter often undergoes partial involution. This is evident by the rotundity which the surface of the enlarged glands presents in adults, compared with the irregularities in earlier life. The diagnosis of adenoids can be made with much certainty in the more pronounced cases by noting the facial expression and characteristic speech. If inspection shows no nasal obstruction, we would expect to find the obstruction in upper pharynx. It might, however, be due to excessive enlargement of posterior ends of the turbinals or fibroid tumor, although this is rarely the case, especially of the latter. A positive diagnosis cannot be made until a digital or rhinoscopic examination is made, revealing to the finger or the eye the presence of the growth.

In young children it is impossible to obtain a satisfactory view of the vault with a mirror; so a digital examination is made necessary for a positive diagnosis, and to determine size and location of growth; this is made by pressing the cheek well between the teeth, so as to keep the mouth open and prevent the child from biting. Insert index finger through the mouth into upper pharynx by sliding in behind the palate, and observe

the resistance met with in feeling for the upper rim of the nasal passage. In normal instances you will find posterior wall and roof resisting and clear, while in adenoids you will find a soft cushion like gland lining pharynx and encrouching upon its caliber. As a rule the finger gets bloody. The finger examination is not a pleasant one to the patient, but a mirror examination is not practicable under the fourth year. It is quite feasible in children after the seventh year. A partial view is sometimes obtained by direct inspection with the head thrown well back and the soft palate elevated or lifted up.

In young persons the surface of the gland is irregular, composed of ridges running antero posterior; usually about six in number. As the patient grows older, these irregular ridges become less pronounced, and the gland becomes somewhat harder.

Enlargement of the pharyngeal gland or tonsil is supposed to be the result of acute coryza in childhood. Successive attacks gradually lead to a full development of the adenoid tissue. This as a rule begins in the first years of life, rarely after the third year. It sometimes appears as a family trait; several cases occurring in the same family, due probably to an inherited diathesis, or possibly to exposure to the same unsanitary conditions. It is favored by small dimensions of the nose and pharynx, and strikingly absent in subjects having spacious passages of nose and pharynx.

As to treatment, the prevailing idea at the present day is that every enlarged pharyngeal tonsil which causes any symptoms whatsoever, should be removed by operation. Where an enlargement has been discovered by accident, and has not caused any untoward symptoms the question of operation may be left for a future time. The operation is attended with but little risk. You may have some bleeding in poorly nourished subjects or others who are bleeders, if not properly watched after the operation. You always have profuse momentarily hæmorrhage in operating. If persistent you would suspect some shreds incompletely detached. Plugging of post nasal space is rarely necessary. Beyond a slight fever following the operation for twenty-four hours, there are no evidences of any disturbance; rarely any soreness, and the wound heals in about one week. There is sometimes some suppurative discharge. There is no after treatment required as a rule.

After the removal of adenoids all symptoms produced by

their mechanical presence will rapidly subside; while the remote consequences will disappear gradually. Even an incomplete removal may give temporarily satisfactory results; however, if the subject be very young the liability to subsequent growth is great; a complete removal precludes relapses. Where you have nasal complications, such as stenosis, purulent rhinitis or sinus affections, the benefit of the operation may be masked. The operation may be done with or without anæsthetic. Statistics would indicate that the danger comes from the anæsthetic, as we have eighteen deaths recorded from 1892 to 1898 done under narcosis from American and English sources. Bromide of Ethyl has been lauded by some; Cocaine by others. The pain in well arranged operations is not sufficient to necessitate the superfluous risk of an anæsthetic; however, in unruly children it becomes necessary, or if you intend doing a tonsilotomy at the same time. As the triple operation would be rather great without narcosis. With narcosis the head must be pendent over the edge of operating table, or the body turned well to the side, so as to prevent blood entering lower air passages. When operating without narcosis the child is firmly held in the lap with the body tilted forward and head thrown back. The pain is very much reduced and the bleeding lessened by the alternate applications of Cocaine and Adrenalin. The easiest and quickest, as well as the most thorough mode of operation is by means of the Schutz Quillotine or Gottstein's Adenoid knife. The instrument is slid in behind the palate, pushed upward and backward with considerable force, and with one sweep remove the entire adenoid growth. The ordinary sized instrument will fit any child over three or four years of age. With the Gottstein knife, which should be well sharpened, you slide in place along the posterior edge of the vomer, and then is forcibly pushed backward and downward. If adenoids are soft you will remove them with one sweep, but if they are more or less hardened the instrument may have to be inserted repeatedly until the finger finds the space clear. Should any fragments be left in pharynx, they may be a source of trouble, either in causing a recurrence of the growth, especially if the patient is very young, or give rise to persistent hæmorrhage, so it is advisable after an operation for adenoids, to thoroughly sterilize finger and thoroughly examine the vault and remove any shreds or fragments that may remain.

As for the medical treatment of adenoids, opinions are divided, personally I have never been able to find a remedy that would cure; however, I believe that carefully selected remedies will very often greatly relieve your patient. Among the most useful I have found Calphos, Calflor, Caliod, Iodine, Sili, Kali sul and Kali mur.

Local applications to vault will often relieve many of the distressing symptoms, and sometimes seemingly permanently decrease the growth. There are many more interesting points that might be touched upon relative to the pharyngeal tonsil, but we will now say a few things relative to the faucial tonsils.

FAUCIAL TONSILS, AND THEIR TREATMENT.

As the enlargement of faucial tonsils is more common than that of the pharyngeal tonsil, it too begins in early life, rarely later than about the tenth year, and remains unchanged during subsequent development. The protrusion of the enlarged tonsil is either inward or outward. In the former case the tonsil protrudes into fauces as a more or less globular mass. In the latter case the adenoid cushion spreads out, but is somewhat hidden between the pillars, and finds room for its overgrowth by crowding the tissues outward and somewhat upward. In some of these types the tonsil may scarcely protrude, while the palatal muscles are at rest, but becomes very prominent during the act of gagging. Commonly the tonsil grows both inward and outward, and may be very unequal on the two sides, but when an outward growth occurs it involves usually the two tonsils to a symmetric extent. The enlarged tonsil when not inflamed, is of a pale color, showing the crypt orifices very distinctly, however, large tonsils during childhood are in a state of chronic inflammation, and present a redness which extends over the adjoining part of the palate and anterior pillar. Hypertrophy does not change the structure of the tonsil; all its constituent elements are uniformly involved. During the earlier period of the enlarged tonsil it is soft and quite vascular. The application of Cocaine or Adrenalin to such a tonsil will cause them to become very much smaller in size. Later in life many tonsils undergo fibrous changes, and become quite hard, with connective tissue and stroma predominating over the lymphoid cells; although less vascular your liability to hæmorrhage is much greater during operation on account of imperfect retraction of the blood vessels, owing to the arterial walls having taken on a fibrillar sclerosis.

Enlargement of the faucial tonsils is produced by exactly the same causes as that which produces hypertrophy of the pharyngeal tonsil, namely repeated attacks of coryza during childhood; for the same reason you will almost always find them associated with the enlarged pharyngeal tonsil, and you will with very few exceptions, find an overgrowth of the faucial tonsils, where you have adenoid vegetations. You may find quite large tonsils without a previous inflammatory history, but repeated attacks of tonsilitis is an additional factor to further growth; any nasal obstruction is likewise an important factor. Tubercular pharyngeal and faucial tonsils are rare, and would seem to be secondary to some other focus of the disease somewhere else in the body. Cases of this kind seem to recover from operation the same as the non-tubercular ones.

Enlarged tonsils where not inflamed need not cause any symptoms of disturbance. This is very often the case where their growth is entirely within the faucial space. You will find people in advanced life having this kind of a tonsil, and they will tell you that they have never suffered from them in the least. Not so with the enlarged tonsil, which by their growth have pushed the tissues outward and upward and lay more or less concealed between the pillars, they produce mischief by their mechanical presence causing by pressure engorgement of the posterior ends of the turbinals sufficiently to make mouth breathing a necessity, especially during sleep, in this way simulate the presence of hypertrophy of the pharyngeal tonsil. Yet we find in the great majority of cases their co-existence. The troublesome faucial tonsils and the ones to cause the most mischief, are the large, red ones that are in a state of chronic inflammation—they are permanently reddened. In this condition they may constitute the essential lesion of a chronic pharyngitis, and account for all the annoying symptoms present in this annoying disease. Such as uncomfortable sensations in throat with cough, etc. Tonsils that are persistently red are subject to periodic attacks of acute or sub-acute inflammation until they are removed. Chronically inflamed tonsils may, and generally do, help maintain chronic disease of the Eustachian tube as well as increase the supposed liability to scarlet fever and diphtheria.

When you take into consideration the disturbance produced by enlarged tonsils, it would be well to consider what is to be gained by operation of same. The tonsil that causes no trouble

can be let alone, but whenever any constant or periodic disturbance can be referred to their presence, they should be removed as thoroughly as possible; the taking off of a superficial slice is of little value. The operation is free of any serious risk. There are some fatal cases reported in bleeders and from neglect—however, annoying hæmorrhage is not uncommon, especially in adults with hard tonsils; very little with children; primary hæmorrhage may be avoided by use of hot snare, but you may have a secondary hæmorrhage after detachment of the eschar. There are no large bleeding vessels, but free oozing may occur, especially in hard tonsils, and sometimes is difficult to control. Gargling is of little use; pressure with tampon of cotton held by forceps usually stops it very soon. Adrenalin, Geranium tincture, Tannic Acid, Antipyrin and Monsell's solution of iron have all been effective. There have been some extreme cases reported, in which it was necessary to tie the external carotid artery.

Tonsillar wounds become covered with a whitish gray coating resembling diphtheritic membrane. Superficial infection is unavoidable, but it is not common to see any deeper or serious infection. The annoyance is transient and not attended with any real danger. Tonsillotome wounds generally heal in from five to ten days, according to their size. You cannot keep the wound aseptic, however, there are different antiseptic preparations that can be used as a gargle or spray that will add very much to the patient's comfort, during the healing process, and will have a healthy effect on the wound and will destroy or at least control in a measure the odor of the breath.

Tonsillar wounds always pain more or less, but generally yield nicely to a weak solution of Arnica used as a gargle with Arnica internally.

Unless there is some active resistance expected on the part of the patient, an anæsthetic is not necessary for this operation. A twenty per cent. solution of Cocaine brushed over tonsils a few times is all that is necessary. The simplest mode of operating is by means of the guillotine. Of these there are various patterns. The instrument must be forcibly pressed against the pillars in order to grasp the tonsil. As a rule the globular mass which projects into the faucial space is sufficient for removal, but if you have a broad, flat tonsil hidden between the pillars, after removing what it is possible to grasp with the guillotine, remove the remnants with the tonsil punch or a pair of forceps and long scissors.

In case a tonsil should be very hard and fibrous and hæmorrhage feared, the hot snare should be used instead of the tonsillotome. Where patients object to the tonsillotome, the cautery can often be used to an advantage, and considerably reduce the size of the tonsil. If only a few perforations are made at each sitting, the inflammatory reaction will not be great, and the ultimate result will be shrinkage. Yet the result in the end may not be as satisfactory as that of a clean amputation.

Medical treatment of the hypertrophied faucial tonsils, like that of the pharyngeal tonsil, has never been satisfactory; although there are some remedies that seem to exert a certain amount of influence on them as well as local applications. There are cases of chronically enlarged faucial tonsils that have become quiescent and harmless after the removal of adenoid vegetations.

REPORT OF A CASE OF HÆMOPHILIA TREATED BY CALCIUM CHLORIDE.

BY JAS. M. GODFREY, M. D., PHILADELPHIA, PA.

MALE, age 34 years, American of German descent, brass-finisher by trade. Reported to the accident ward of the Hahnemann Hospital, October 24th, 1904, for treatment of two small lacerations of the scalp, each measuring about 1 to 1½ inches in length. Both were bleeding profusely, although they showed unmistakable evidence of age. From both old clots and shreds of dark tissue were curetted in order to cleanse for suture. Two sutures of silkworm gut were placed in each, but the large hæmatoma under the scalp and the still brisk hæmorrhage demanded investigation and the sutures were removed. No one place of origin could be located, for the blood seemed to ooze from the sides of the wound as though from a sponge, and this in no passive manner. Sutures of silkworm gut were then placed in so as to completely encircle the wounds individually, hot wet compresses with adrenalin chloride and a pressure bandage controlled the hæmorrhage to a great extent and the patient was discharged from the Hospital two hours later.

Upon questioning the following history was obtained: The two above named lacerations were inflicted two years before, while the patient was intoxicated, and had never entirely

healed. On the evening of his first visit to the Hospital, he had fallen, striking the old wounds, which were situated in the occipital parietal region. Profuse hæmorrhage resulted and he reported to the Hospital after trying the ordinary home methods to stop it.

In 1874, he was bitten on the left side of the jaw and gives history of having been treated by Drs. Hering and Thomas at the old Hahnemann Hospital, on Filbert street. Shortly after this he was treated at both St. Joseph's and Women's Hospital for a period of over two years before complete healing took place. The patient presented a receipt from the German Hospital, dated April 19th, 1879, at which time, he states he was treated for the same trouble following a laceration of the tongue.

In 1885, the patient had a molar tooth extracted by a "street fakir," resulting in hæmorrhage which was controlled by means of a styptic. A week later, however, hæmorrhage took place while eating and lasted for a great many days before it was controlled, leaving the patient prostrated in bed. Several other minor injuries, having the same result, were added to the above mentioned.

The father of the patient was totally unaffected; the mother, while a girl and up until mature life, suffered at frequent intervals from violent and prolonged epistaxis. Menstruation lasted from five to seven days, and was always very profuse. Of thirteen sons, five died in infancy from causes unknown, and one adult son died at the age of 36 years from pneumonia. Five of the remaining sons suffered from epistaxis at intervals and hæmorrhage from slight injuries, but these by care and profiting by experience have been able to avoid any serious results. The one remaining son is the case mentioned, and he seems to be the most affected.

On the evening of November 1st, the patient walked into the Hospital in a pitiable condition. While eating supper the hæmorrhage had started again and he returned with his head swathed in a large blood-soaked turkish towel, his clothing to the waist a mass of blood. It was the work of just one hour and a half to control the hæmorrhage. Silkworm gut sutures and hot wet packs were applied. Pure adrenalin chloride and persulphide of iron, in powder, were poured into the wounds and packs of cotton superimposed, but the blood continued to ooze from around the pack and if anything the hæmorrhage

was increased. The actual cautery was then applied for several minutes, resulting in abatement for a few seconds. The second application of the cautery, followed quickly by a cotton pack saturated with adrenalin chloride and dipped in powder of sulphide of iron, silk protective, bichloride gauze, and a pressure bandage controlled the bleeding in a short time.

Subsequent redressings resulted in hæmorrhage, though not as profuse as before. Phosphorus 3x, 6x, and 30x on pellets were given in turn during the following week with no result. Then Geranium Tincture in one drachm doses every two hours was substituted for a week. Next calcium chloride, grains five three times daily, was given for a period of over two weeks, with a result that in two days after the administration of the first dose, the redressing was made with but slight oozing. Five days later found no oozing at all and at that time the patient presented two clean wounds, even with the surface and presenting all the characteristics of normal granulation tissue. Healing progressed rapidly and in two weeks all dressings were discarded, the patient at last presenting two normal cicatrices.

POST-OPERATIVE INTESTINAL PARALYSIS.

BY M. J. BUCK, M. D., PITTSBURG, PA.

MANY causes have been assigned by various authors for "post-operative intestinal paralysis." From my limited observation, *i. e.*, limited compared to those connected with large hospitals, yet sufficiently large to base an opinion upon, amounting to several hundred sections, done in my private sanitarium, where I have had opportunity to observe every phase of the case from the time the patient entered the house until discharged. In a little "brochure" I issued some eighteen months past, I gave the result of one hundred abdominal sections, and more recently I published the results of two hundred successive successful abdominal sections.

Close observation has led me to conclude that post-operative intestinal paralysis is not in reality a paralysis of the intestines, but a contraction of the bowel, due to the pain caused by the attempt of the gases to pass a certain section of the bowel, which is the result of the contraction of the longitudinal and circular muscular fibres in the attempt to force the gases

on. Nature, in her effort to evade the pain, holds on, and the result is meteorism adding insult to injury.

I do not hold that it is necessary to have an injury to the nerves of the bowel itself in order to produce this state of affairs; it may be transmitted from injury of any of the pelvic or abdominal tissues, yes, even tissues outside the abdomen. It must have been the observation of most surgeons that violent injury of the limbs will interfere with the passing of the gases and urine. I once had a patient suffering a severe pain from pressure on a corn, due to a tight shoe, who was distended and unable to pass the gases until his shoe was removed. How often does one find it difficult, if not impossible, to relieve the meteorism after hæmorrhoidal operations. While one can readily understand that the handling and exposure of the intestines during abdominal work will irritate the bowels, yet I am not prepared to admit that this ordinarily can be assigned as the cause of so-called intestinal paralysis in toto.

The meteorism is due to disturbed rythm of the sympathetic ganglia which have been disturbed by the operation, and the various methods used before, during and after the operation. The element of pain more largely enters into this form of post-intestinal contraction than perhaps all other causes. In every attempt of the bowels to expel the gases a halt is called by pain, and nature desists. I seldom encounter the difficulty I formerly met with, hence I am inclined to think changing of my methods coupled perhaps with more efficiency may explain the better results.

I explained in my "brochure" I seldom, if ever, precede my operations by a purgative. I do not rush my patients to the operating room. I prefer to prepare them by thorough daily massage for a period of from five to ten days. I disabuse the mind of the gravity of the operations, always insisting upon them not knowing the time of operation.

Do not scrub and shave the abdomen except at the time of operation. Use no stimulants, nor heart tonics.

Make as small an incision as is consistent with the nature of the operation.

Make a special effort to keep the bowels inside of abdomen during the entire operation. Use fine ligatures. Never grasp a large portion of tissue in the ligature. Always whip over any raw edges. Use needle with carrier for placing ligatures. Unite abdominal incision by deep buried sutures including all

structures, aside from peritoneum, and skin, the former is united by continuous suture (catgut), the later by continuous subcutaneous suture. Use saline solution by the bowel to quench thirst.

The bowel largely carries on an independent action through the plexus of Auerbach and Meisner and when one of the nerve filaments is impinged or irritated it resents the insult by holding fast. In many instances where the bowels proper have been unharmed the meteorism has been just as marked. If my judgment does not err I hold impingement of nerves by tying up of too much tissue by large ligatures which have necessarily to be drawn very tight, is the most prolific cause of meteorism. Twice I have been consulted for the most obstinate constipation and accumulations of gas, which I have only been able to relieve by removing a large ligature applied to a pedicle of an ovarian cyst, one of six months', and the other thirteen months' standing. I can scarcely conceive of intestinal paralysis suddenly disappearing on the insertion of a rectal tube and removing the accumulated gas.

I have long held that what is usually termed "Post-operative Intestinal Paralysis" is in reality an irregular spasmodic contraction of the bowels due more largely to the insult offered the surrounding structures, and not to the bowels directly. In order to overcome this I advocate not to use purgatives preceding the operation, except in extreme cases. Feed the patient well before operation. Use mental and manual therapeutics largely, and use small ligatures, grasp minimum amount of tissue, whip over all raw surfaces. Unite incision by avoiding passing sutures through the skin. Use saline solution to quench thirst. Avoid the use of stimulants, heart tonics and anodynes.

As to the anæsthetic playing an important role in intestinal paralysis I have not been able to verify this statement. I have only seen constipation result when the patient was compelled to keep the recumbent posture after the use of the anæsthetic. When able to go about after taking of an anæsthetic constipation has not resulted. In my last hundred cases only two of those had any disturbance of the bowels which were relieved by high enemata.

EDITORIAL.

CONRAD WESSELHÆFT, M. D.

Born March 23, 1834.—Died December 17, 1904

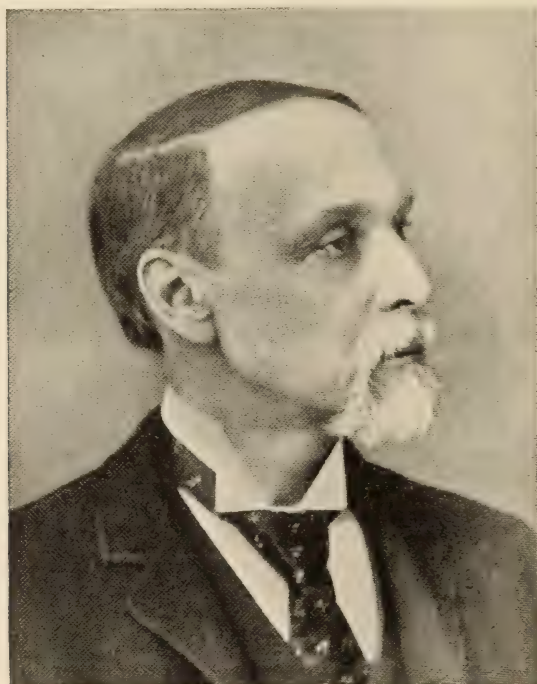
IT has been our sad duty within the last three months to chronicle the death of two eminent homœopathic physicians, one in England—Dr. Robert Ellis Dudgeon—and one in America—Dr. Wm. H. Bigler. Now another able and indefatigable defender of the homœopathic method of practice has been taken from us—Dr. Conrad Wesselhæft, of Boston.

Dr. Wesselhæft was born in Weimar, Germany. When six years of age he came to the United States. At the age of fifteen he entered the St. Thomas Gymnasium at Leipzig, where he graduated at the head of his class. On his return to America he entered the Harvard Medical School, where his zeal in the study of medicine won the admiration and respect of his professors.

Through the influence of his uncle, Dr. William Wesselhæft, he became interested in the theories of Hahnemann, and after thorough investigation and study became an enthusiastic advocate of homœopathy. After receiving his degree, he settled at Dorchester, Mass., but soon removed to Boston. Here he took an active interest in the advancement of homœopathy, and was one of the founders of the Boston University School of Medicine. He was Professor of Pathology and Therapeutics in that institution from 1873 until the time of his death. In 1876 he published his translation of Hahnemann's organon. In association with Carrol Dunham, Wells of Brooklyn, J. P. Dake and others, he labored for the advancement of the American Institute of Homœopathy, and in 1879 was elected President of that organization.

The long list of scientific and brilliant papers read before the Institute by Dr. Wesselhæft indicates how unceasingly he labored to find out the truth, and how dear to his heart were the

essential principles of homœopathy. Perhaps the most important of these papers was entitled "The Demands of Modern Science in the Work of Drug Proving." In this masterly article Dr. Wesselhœft reported the results obtained from provers after the administration of *saccharum lactis*, and thus demonstrated the necessity of control-tests in drug proving. Among other labors of Dr. Wesselhœft's life may be mentioned his co-editorship of the *Cyclopedia of Drug Pathogenesis*, and the *Pharmacopœia* of the American Institute of Homœopathy.



Conrad Wesselhœft

It was characteristic of Dr. Wesselhœft never to believe a thing because it was pleasant or profitable to believe, unless such belief was substantiated by scientific facts. It was his constant effort to so formulate the principles of homœopathy that they should accord with the established principles of modern science. On account of the emphasis which he laid on the

importance of scientific observation and investigation he sometimes incurred the criticism of those who based their opinions solely on their own limited experience, or who adopted as their essential principles those of Hahnemann's hypotheses which are not consistent with our present knowledge. Dr. Wesselhøft's life was devoted to the interests of truth, of his profession and of humanity, and as long as the annals of homœopathy shall endure, his name will be cherished as one of its wisest and noblest adherents.

SHALL THE INSTITUTE TRANSACTIONS BE PUBLISHED IN JOURNAL FORM?

THIS is one of the questions which will come up for consideration at the coming Institute meeting, and is of more than passing importance. With those who have proposed the measure, we believe that if the organization for the publication of the journal can be established, it will prove a good thing for the Institute and the profession at large; we also contend that the question must not be decided one way or another without painstaking deliberation. The matter of an Institute Journal has been talked of for several years, but "talk" is about all that we have heard. Committees having the matter in hand seemed to have but a hazy idea of what was required; and so the matter has been quiescent. Back of the proposition is a strong professional sentiment in its favor. Its friends refer to the general lack of interest displayed in bound volumes of transactions and to the great prosperity of the American Medical Association's Journal.

Believing as we do that the Journal should be established, we contend nevertheless, that the enterprise must be undertaken with full knowledge of the difficulties to be encountered; difficulties which the American Medical Association faced, and which we likewise must meet.

The friends of the venture assert the following advantages for publication in journal form:

1. That the publication of the transactions in journal form will add greatly to the number of Institute members.

2. That a journal will make a much more acceptable medium for the publication of papers and discussions presented to the Institute and its tributary societies.

3. That the papers and discussions will be more generally

read, and this will encourage a better class of papers, and thereby add interest to the meetings.

4. That the journal will secure valuable advertising contracts which will do much towards defraying the expenses of publication.

The truth of these four propositions must be admitted by all, for they are self-evident. But there is a very important "if" to be considered, and that is—

IF THE JOURNAL IS PROPERLY AND ABLY CONDUCTED FROM BOTH EDITORIAL AND BUSINESS STANDPOINTS.

Besides this logical reason, we have to contend with "the knockers." We have "knockers" everywhere. They are a nuisance, it is true, but we must put up with them. They are of some use, for they prevent majorities from ignoring the wishes of the minority, which statement may be interpreted to mean that they sometimes prevent majority rule.

Repeating a previous remark we say we believe the journal to be a good thing. The following criticisms must not, therefore, be accepted as offered in a captious spirit, but rather as presenting to the profession a clear statement of the difficulties in the way and of what is before us in this new business venture. As the Journal of the American Medical Association has been offered as our model, we shall accept its experience as far as we know or surmise it.

That journal now claims a 35,000 circulation. The great majority of these copies go to members of the Association. But there are many which are taken by other physicians of all schools of medicines; there are many foreign subscribers; and there are copies to exchanges the world over; and many copies are used for business purposes. Let us surmise that 30,000 go to members of the Association. There are 125,000 physicians in the United States. If we assume that the Institute journal will prove as successful as that of the Association, we will secure 3,000 out of our 12,000 physicians as members of the Institute.

In order that the journal shall add to the Institute membership, it must be a five dollar journal, because that is the amount of our annual dues. It will never do to give the membership anything else. Objectors to this proposition may say: "We can give a three dollar journal and the other two dollars will be a very cheap expenditure for institute membership." We reply: "That is true; Institute membership is cheap at five dollars,

let alone two dollars. But we are after increased patronage, and that demands that we shall give much more for the money than ever before. Besides the advertisements are expected to be a great help." Our readers must remember that too many men forget the principles involved in an organization and think only of the *pro quid quo*.

The HAHNEMANNIAN MONTHLY as the largest of our medical journals may be taken as the sample for guidance. It gives its readers each month 80 pages of regular reading matter and from 12 to 32 pages of news, making in all an aggregate for the year of 1,152 pages exclusive of index. The Journal of the Institute must in order to maintain its standard as a five dollar journal, give 1,920 pages annually.

Now where shall we get this material to fill these 1,920 pages? Of course it can be done, and done creditably; but we must look the proposition fairly in the face lest we fail in the undertaking. The contents of the new journal will naturally fall under about the same headings as in the HAHNEMANNIAN, namely:

Original articles.

Editorials.

Abstracts.

Homœopathic retrospect.

News.

Institute and Society reports.

The 1904 Transactions contained 1,131 pages of which not a little would be inappropriate in a journal; but let that pass. Papers and discussions made up 825 pages. In 1903, papers and discussions amounted to but 488 pages. To these figures must be added the papers of the Ophthalmological and Otological Society, which must come into the venture or suffer excommunication. The HAHNEMANNIAN endeavors to present 50 pages of original articles monthly. The new journal must publish 83 pages. On the 1904 basis, the Institute will have enough copy if the O. and O. Society proceedings be included. On the 1903 basis the material will last but six months.

Even though we fell short of material, it is claimed that it will be an easy matter to secure many of the papers read before various State societies. So it will. But unfortunately, such societies will demand that the Institute must publish all or none of their communications, and deny the rights of a rigid censorship of an executive or publication committee not appointed by their several bodies.

Institute papers must, of course take precedence. Until all are printed, no foreign contributions should be permitted. This will force those who desire to contribute to the Institute journal to read their papers before that body, or send them elsewhere.

There is likely to be some trouble from authors whose papers are kept in editorial pigeon holes nearly a year before publication.

Next come the editorial pages, which should amount (again taking the *HAHNEMANNIAN* as an example) to not less than nine pages each month. This means that the editor or editors must find topics for comment; and that he must comment in an erudite and logical way; that he must not inflict his own personal views with too much pertinacity; and yet all of us must acknowledge that he must be a man of strong personality.

In this department of the journal we will have the great bone of contention, for it is a physical impossibility for an editor to write editorials which shall please the entire Institute body. If true liberty of the press is permitted, no serious damage will follow. But there are narrow minded men of all shades of opinion in the Institute as in all other associations, whether of high or low degree, medical, historical, philosophical, or otherwise. And these men will make disturbances when editorial views do not accord with their own. They will make it hot for the editor. They are few in number; very few indeed; but they can make themselves heard and felt. The new organization must suppress them, and stand by the man at the desk, namely, "OUR EDITOR." If we do not back him as long as he is honest and sincere, our journal will not be worthy of the profession it represents. Mistakes he must make; who does not? With experience he will make fewer of them.

Next comes the department of abstracts. This will include able reviews of the medical and surgical literature of the world. German, French, Italian, Spanish, Danish, Russian, Japanese, Scandinavian, British and American medical journals of the allopathic school must be reviewed carefully by men conversant with the various languages, and by specialists in various branches of medical knowledge. As very few of the journals above referred to will exchange with Homœopathic journals, they must be secured by purchase. This will prove expensive. But the department if properly conducted will be invaluable to the readers.

Next comes the review of Homœopathic literature, which must be conducted by a *materia medica* expert.

The above constitutes what we must do to have a journal, and *it must be done well or not at all*. We must have an editor. *Where is the man?*

Find him and he must be paid. He cannot devote his time to anything but the journal. He must have an assistant editor to take his place when sick, succeed him at death or resignation and assist him at all times. He should also have a stenographer. Both editor and assistant must be paid salaries commensurate with their abilities and sufficient to support them free from the annoyances of private practice.

Next come the translators and gleaners. Some will say that this is easy. So it is after a fashion. But the gleaners must be depended upon to send in their material with unfailing regularity month after month. The editor must have strict supervision over them. These men must be paid according to the space they occupy. If they are not paid, the editor cannot command their time.

The Retrospect man will likewise demand a salary.

And the same for the news correspondents.

The Journal will require a business manager, and he must be a good one. His entire time must be devoted to the journal.

It is expected that advertisements will come easy. This is a mistake. This means work. Moreover, every advertisement offered will be objected to by some members of the Institute. Thus comes in a bone of contention. We say, "Suppress the objector and back our business manager. If he is not faithful, get another, but do not waste time over talk."

A very large staff of news correspondents must be secured. Really, we must have nearly as many as the Association's journal.

In using the journal of the Association as an example, we must remember that it probably has receipts amounting to about \$400,000 annually. If the Institute journal does a business of \$25,000 after its organization is completed, it will be doing very well indeed.

The objection offered that the Institute journal will hurt other journals is not to be considered. Any journal with not sufficient enterprise to compete with a new aspirant for honors should go to the wall.

Besides the above remarks, there is much to be said in the matter of details.

The Journal of the Association had its troubles. For years it was a very poor specimen of medical journalism. Of late years it has improved greatly, and at the present time, there is no better in the old school list of periodicals. We must go through the same course of evolution.

The following quotation from the *American Physician* indicates that even in the American Medical Association there is constant wrangling over the way the journal is to be conducted :

“ ‘The members of the [American Medical] Association are paying into its treasury something like \$40,000 a year more than it needs; they are paying enough to enable the trustees to provide them with not alone the best journal in the country, but also with one which does not, in its every issue, make a laughing stock of the principles of ethics to which every member of the Association has subscribed. The Publication Committee is advised that one member of the trustees looks upon the article printed in August on this subject as facetious. There is nothing facetious about it. There is not the slightest bit of facetiousness about the grafting that is being worked upon the medical profession through its complacency and with the paid-for assistance of the medical journals, including the “biggest advertising medium for proprietary remedies in this country,” the Journal A. M. A. Every issue tends to debauch the mind of some of its members; it recommends to them all to make use of or prescribe secret remedies; it uses \$15,000 (about) of the dues paid in by members of the Association to help in its work of “promoting the use of secret remedies.” The trustees of the A. M. A., who are responsible, may think this is facetious, but some day they will awake to the fact that they had a good, long, complacent, pipe dream. Their contention that it is not possible to determine which ads are ethical and which are not, is simply absurd, puerile, and idiotic. Let them answer these simple questions: Is it a medicine? Is the composition of this stuff known to the doctor who is asked to prescribe or use it? Are the advertising statements made within the truth? Is it advertised to the laity? In answering the second question it is not simply necessary that the composition shall be known to the editor, or the trustees, or the manufacturer, or to some other irresponsible person or persons; does the doctor who prescribes the stuff know exactly what his patient is going to take? Facetious! Heaven save the mark!—*Jour. of the N. Y. Med. Asso.*’

"And still it is upon advertisements of this ilk and pattern that some members of the American Institute of Homœopathy believe that they can carry an Institute journal, instead of printing an annual volume of the Transactions! Is this not true? For what else is there in the Homœopathic school to advertise except its colleges, a few pharmacies, a few books, and perhaps the individual cards of members? Is not this being done just as well by the present day journals? An individual journal may advertise many things which an Institute journal cannot consistently touch. An individual journal, too, may discuss and criticise subjects which could find no place in an Institute journal.

"Would not the carrying of such proprietary medicine advertisements make us, equally with the old school, the laughing stock of all sober-minded medical men, in our own ranks, as well as those in all other schools?"

RADIUM.

A REVIEW of the history of medicine reveals the fact that whenever a new or powerful therapeutic agent has been introduced, medical literature at once teems with marvelous reports of its efficacy and value. Such premature statements represent either the *hopes* of the investigators rather than *observed facts*, or are inspired by the desire on the part of the writers to have their names connected with the new agent as being among the first to use it. The wise physician, therefore, will reserve his judgment until the excitement of the discovery is over, and until there is such an accumulation of observed facts and clinical experiences as will warrant the formation of an opinion as to the advantages and disadvantages of the new agent from a practical standpoint.

Radium was first obtained by Mme. Curie from pitchblende. Preceding this Becquerel had found that uranium gave off rays which affected photographic plates in a manner very similar to the X-rays. The commercial source of uranium is pitchblende and Mme. Curie found it to be radio-active to a higher degree than uranium. She then took up the search for the original source of the radiations, and after several months of repeated precipitation, filtration and crystallization she succeeded in obtaining in the form of a "chloride" a hypothetical element to which the provisional name of *Radium* has been

given. The free element has never been isolated. The salts used ordinarily are the chloride or bromide of radium. It required two tons of pitchblende to produce 1-10 grain of radium chloride. The only source at present is Bohemian pitchblende, but careful search is now being made in the United States for radium-bearing minerals.

Radium belongs to the group of alkaline earths, together with barium, calcium and strontium. Its atomic weight is 225, and is greater than that of any known element except thorium (231) and uranium (239). The activity of radium is expressed in units, the radio-activity of uranium being taken as the standard of measure. The activity of the pure bromide of radium is from 1,500,000 to 1,800,000 units.

Radium gives off three kinds of rays: *alpha* rays, *beta* rays and *gamma* rays.

The *alpha* rays are a stream of small particles of matter positively charged with electricity. They are projected at the velocity of 20,000 miles per second, and can be deflected by a magnet. These rays constitute 99 per cent. of the radio-activity of radium. Their penetrating power is very slight, as they are intercepted by mica plates or glass. For this reason they have practically no therapeutic value.

The *beta* rays consist of a stream of very minute particles (about 1-1000 the size of a hydrogen atom) negatively charged with electricity. They are projected at the velocity of about 186,000 miles per second. They constitute 0.9 per cent. of the rays from radium. It is supposed that they are identical with the cathode rays of Crookes. After passing through a solid they become X-rays. It is to the *beta* rays that radium owes its therapeutic value. These rays are capable of penetrating the tissues of the body to the depth of one-half inch.

The *gamma* rays are simple vibrations of ether without matter. They travel with enormous velocity, and are identical in properties with the X-rays from a high vacuum tube. These rays are very penetrating and easily pass through the human body. They constitute only 0.1 per cent. of the radio-activity of radium.

The first effect of radium on the skin is to produce an erythema; longer exposure produces a marked dermatitis, followed later by necrosis and an indolent ulcer. Such ulcers require about two months to heal. These skin lesions are very similar to those produced by the X-rays. Microscopical ex-

amination of tissues exposed to radium reveals the presence of an inflammatory reaction, endarteritis and degeneration of the cells. Tumor cells degenerate more rapidly than the cells of normal tissue, because of their lower resisting power. Thus the microscopic changes, as well as the gross changes produced by radium are almost identical with those produced by the *X*-rays. Aside from these properties the rays from radium (Becquerel rays) have undoubted bactericidal properties.

From a therapeutic standpoint radium possesses three properties which we may utilize: the power to alter cell metabolism, the power to kill bacteria, and to destroy cells of low resisting power. From this we can see that its sphere of usefulness would be in inflammatory diseases of the skin, such as lupus, erythematosus, eczema and lichen planus; in bacterial diseases of the skin, such as acne and lupus vulgaris; in the destruction of new growths, such as epithelioma, carcinoma and sarcoma.

In reviewing the clinical results obtained by the use of radium in these conditions we find that they are, broadly speaking, not as favorable as the results of treatment by the *X*-rays. In carcinoma of the skin without metastases some very favorable results have been obtained. Epitheliomas have been cured by the radium rays, as have also a few cases of acne and lupus. Only in rare instances, however, have these results compared favorably with the improvement caused by treatment with the *X*-rays. The treatment of deep-seated malignant growths by radium has been far from encouraging. Its weak penetrating power accounts for this fact. More encouraging has been its use on growths inaccessible to the *X*-rays, as carcinoma of the uterus, oesophagus or rectum.

It is evident that the rays from radium have pathogenetically and therapeutically the same effects as the *X*-rays, only in a minor degree. Their greatest drawback is their lack of penetrating power. The expense of the radium and the impossibility of obtaining it in proper quantities are also serious objections to its practical use. The strongest point in favor of radium is that it can be used in portions of the body which are inaccessible to other forms of radiant treatment. In other respects both theoretically and practically radium is inferior to the *X*-rays. From our present knowledge of its properties we believe that it is an agent with a very restricted field of usefulness, and that it cannot replace the use of the *X*-rays except in a few rare and peculiar cases.

CLEANINGS.

OPHTHALMIC DON'TS.—I. Don't forget that one-tenth of the blindness in the United States is caused by Infantile Ophthalmia.

2. Don't fail to use a 2% solution of protargol or silver nitrate in the baby's eyes as a preventative. It may save trouble later.

3. Don't neglect to keep the child's eyes free from discharge by frequent flooding with boric acid solution or some other cleansing wash when the disease has appeared.

4. Don't mistake a redness and lachrymation in an infant for cold; you may regret it when too late.

5. Don't allow a young child to play with sharp pointed scissors; many an eye has been destroyed by an accidental puncture.

6. Don't allow the baby to handle a button fastener; the lid has often been torn by being caught on the hook.

7. Don't fail to have the refraction examined when corneal ulcers occur; they may be due to eye strain.

8. Don't forget the possibility of adenoids when a child's eyes keep red and suffused.

9. Don't persist in giving medicines for repeated frontal headaches; astigmatism may cause them.

10. Don't make a prescription at all until you have found what you are prescribing for.—*F. Park Lewis, M. D., Buffalo, N. Y. The Homœopathic Journal of Pediatrics.*

WILLIAM SPENCER, M. D.

OPHTHALMIA NEONATORUM.—Reynold Wilson says the demands in the matter of treatment of this state are met by the following method of procedure:

1. The antepartum care of the birth canal.
2. The scrupulous cleansing of the lids following expulsion of the head, and constantly thereafter in suspicious cases.
3. The non-invasion of the palpebral sac by separation of the lids before the appearance of typical discharge.
4. Prompt and absolute isolation upon the appearance of conclusive signs of specific inflammation.
5. Thorough and systematic irrigation.
6. Astringent application of silver nitrate in cases of prolonged suppuration.

In conclusion, as an important adjunct to local treatment, attention should be given to the general condition of the child in cases of debility and malnutrition. The measures directed toward the care of the infant are comprised in cod liver oil inunctions, bathing, hygienic measures and breast feeding. At the same time the mother should receive some form of tonic treatment.—*Phila. Med. Jour.*

WILLIAM SPENCER, M. D.

AMAUROSIS (ATROPHY OF THE OPTIC NERVE) AND ITS TREATMENT BY THE SUBCUTANEOUS INJECTION OF STRYCHNIA.—Hasket Derby, the well-known ophthalmologist, states in a paper on this subject, his views in the following words:

To sum up the whole matter, it is freely admitted that these cases are not brilliant as to result. But the malady is in itself so fatal, and has been regarded as so hopeless, that it seems to me the smallest chance of relief, whether temporary or permanent, ought not to be allowed to slip. The following conclusions are justifiable:

1. Strychnine is stimulant to the optic nerve. Even in normal eyes it slightly increases the acuteness of vision and widens the visual field.

2. In certain cases of optic nerve atrophy its local subcutaneous injection has, to say the least, coincided with an arrest in the progress of the disease, and has been followed by a somewhat increased acuteness of vision. Whether these effects are temporary or permanent, time and fuller statistics will show.

3. In a progressive case of this disease it is clearly our duty to state the above facts to the patient, and allow him to take the treatment if he is so inclined.

4. The strychnine should always be administered in the temple, and by subcutaneous injection.—*Boston Med. and Surg. Journal*.

WILLIAM SPENCER, M. D.

THE IRIS AND PUPIL IN DISEASE.—Not infrequently an examination of the pupil and its reaction will enable the general practitioner to arrive at a diagnosis in obscure disease. Without going into the anatomy, nor the causes for the various actions and reactions, it is believed that the following points are worth noting as of assistance in differential diagnosis:

First.—In inflammation of the iris the pupil is sluggish in reaction to light, if unilateral the inflamed iris has a small pupil. An irregular outline to the pupil is due to iritis with adhesions between the iris and the anterior lens capsule. Inflammation of the iris should suggest gout, rheumatism or syphilis, though the disease may be traumatic or idiopathic.

Second.—The Argyll-Robertson Pupil. The condition on which the pupil does not react to light and shade, but contracts in accommodation. This is found more frequently in locomotor ataxia, when it is due to sclerosis of Meynerts fibres, or of that portion of the third nerve nucleus which presides over light reflex, the portion regulating accommodative contraction not being involved. The Argyll-Robertson pupil is usually contracted because the cervical cord lesions interfere with the dilating mechanism. The same reactions are sometimes seen as a symptom of intracranial syphilis and of progressive paresis of the insane.

Third.—Light reflex with Lack of Accommodative Reaction. A condition directly the opposite of the Argyll-Robertson pupil, is of infrequent occurrence. It most likely points to a lesion of the portion of the third nerve nucleus which controls accommodative reaction. It may be associated with paralysis of the ciliary muscle after diphtheria.

Fourth.—Dilated Pupils. The dilatation may be unilateral or bilateral. Unilateral dilatation, except when due to mydriatics, is strongly suggestive of serious organic disease and should always lead to a searching exami-

nation for such lesion. It may be due to disease of the optic nerve, as in atrophy, to lessened transparency of the refracting media, as in corneal opacities, or opacity of the lens. If the pupil does not react directly to light but does react to light thrown into the other eye, it shows that the disease is in the optic nerve or tract, and not in the oculo-motor nerve of the diseased side, its nucleus nor in its communication with the optic tract of the sound side.

As irritation of the cervical sympathetic causes dilatation of the pupil we find unilateral dilatation arising from a tumor in the neck, aneurism of the aorta or aversion of the innominate artery or paralysis of one third nerve.

Bilateral dilatation is associated with total blindness. It is present in cerebral anemia as found in general anemia, syncope, shock, nausea and aortic regurgitation, strong emotion, hysteria, cerebral hemorrhage, in coma following epileptic convulsions, in melancholia, in fevers with delirium, poisoning from a number of drugs, etc.

Fifth.—Contracted Pupil. Unilateral contraction may be congenital, but it usually indicates a more or less serious lesion. It will arise from any cause that is sufficient to paralyze the sympathetic cervical fibres which control the dilatation of the pupil, hence we find it as a result of tumors in the neck, of aneurism of the aorta and innominate, when the pressure becomes sufficient to paralyze the sympathetic, as stated above we have first dilatation from irritation and later contraction from paralysis of the sympathetic. We find it is a symptom of locomotor ataxia, general paresis of the insane, and in any lesion of the cervical cord which may be unilateral at some time in its history, iritis, from the introduction of myotics such as eserine, pilocarpine, etc. Bilateral contraction occurs in iritis, in the congestion arising from typhus, in mitral insufficiency, in retinitis with photophobia, in bilateral diseases of the cervical cord when the cervical sympathetic is paralyzed, hence is found in locomotor ataxia, which it should suggest to the mind when first seen; in disseminated sclerosis, general paresis, spinal meningitis, and other lesions involving the cervical vertebra.

It occurs from any disease causing irritation of the third nerve center, hence is found in cerebral meningitis, in cerebral tumor or abscess, in cerebral hemorrhage, in sun-stroke and in uremic poisoning.

In general it should be remembered that while irritation of the third nerve centre produces contraction of the pupil, paralysis of the same centre produces dilatation of the pupils, hence contraction not infrequently precedes dilatation in the same disease process; while in the cervical cord the opposite holds true, irritation produces dilatation and paralysis of the cervical sympathetic contraction of the pupils, here dilatation occurs early in disease and contraction later.

WILLIAM SPENCER, M. D.

UREMIC ONSET OF TYPHOID FEVER IN A GIRL THREE YEARS OLD; RELIEF FROM LUMBAR PUNCTURE.—Alfred Hand believes that typhoid fever, beginning with symptoms of acute nephritis is of frequent occurrence. He relates the case of a girl three years old that came under his notice who suffered for a period of about ten days with indefinite feverish symptoms, probably an irregular form of infection with the typhoid bacillus. Ten days later her temperature rose rapidly to 103.6°F., followed by convulsions and deep

unconsciousness. The urine was scanty, highly albuminous and contained casts. On account of the stubborn nature of the convulsions, lumbar puncture was advised and 50 c. c. of cerebrospinal fluid withdrawn, normal in appearance. Following the puncture, there was prompt cessation of the convulsions and return to consciousness. The fever, however, continued, running a typical typhoid course.

The interesting points in the case are the appearance of uremia as the initial symptom of typhoid fever and the relief of the uremic manifestations by means of lumbar puncture. Although this is a method of comparatively recent date, still it has been accomplished so often that it stands as an established therapeutic procedure.—*Archives of Pediatrics*, Nov., 1904.

OVERPRESSURE IN SCHOOL.—L. E. LaFetra discusses editorially the prevalence of chorea in the late winter and spring as contrasted with its scarcity in summer and fall. He rightly points out the fact that during the months of October and November it is difficult to gather sufficient cases, even in a large ambulatory clinic for satisfactory clinical teaching, while in March and April the dispensaries are crowded with pale, thin, ambitious children, mainly girls, presenting themselves for treatment, either as new cases or relapses.

The factors entering into the production of this great number of cases in spring are undoubtedly several. Firstly, there is at this season an erethism or irritability of the nervous system common to all animals. Again, the chorea may be a sequel to rheumatism acquired during the cold months. The anemia of winter indoor confinement is another predisposing factor. But undoubtedly the most important exciting cause, at least in those cases not distinctly rheumatic, is excessive stimulation of the cortical cells of the brain. This results in gradual malnutrition and consequent overexcitability of these cells. Our late Prof. Wm. H. Bigler always laid especial emphasis upon the evil results to the nervous system that resulted from the modern imperfect public school methods in which overpressure is the chief error, and he placed chorea as one of the most frequent pathological conditions resulting from this cortical exhaustion.

Hodge has shown that as a result of fatigue the nerve cells shrink in size, their nuclei and nucleoli become shrivelled and the lenticular granules of the protoplasm, probably nutrient, disappear. While under ordinary conditions the cell is promptly restored to normal after a period of rest, a much longer time, and sometimes a protracted period of rest is required for this restoration in anemic, neurotic children. Griesbach's interesting experiments with the esthesiometer have given valuable data in the study of school-fatigue in children, and when this method of investigation shows in a given case that recuperation is sub-normal, we should accept this as a danger signal. If fatigue is prolonged it becomes cumulative, and then complete recuperation is impossible if the child is kept at school.

Learning lessons at home is to be discouraged in children under twelve years old. This is the hardest school work, and all studies requiring memorizing should be studied in the morning hours in school, under the guidance of the teacher. To learn how to concentrate the attention is more important than to memorize lessons.

Competitive examinations as well as school prizes should be abolished, and the writer is of the opinion that pupils should be promoted so far as is possi-

ble on their daily work. Backward and deficient pupils, as well as the delicate and neurotic should receive special instruction in small classes. He sums up by saying that children of alcoholic, tuberculous and neurotic family history are to be watched especially. Persistent headache not due to eye strain; disturbed sleep, morning languor and loss of appetite are warning symptoms; if they persist after modification of the school *regime* the child should be kept from school for three or four weeks, or until all signs of nervous exhaustion have disappeared. Disregard of these early symptoms risks the more serious results of overpressure, such as chorea, neurasthenia, hypochondriasis, hysteria, and even epilepsy and insanity in those who have a neurotic heredity.—*Archives of Pediatrics*, Nov. 1904.

C. SIGMUND RAUE, M. D.

THE EFFECT OF SUPRARENAL PREPARATIONS OF LIVING PROTOPLASM.—*Douglass*.—The subject in this aspect is quite novel and interesting. Many clinicians will agree with the writer when he says there are certain detrimental effects following upon its usage. One reason for this statement is that the conditions are always incident to its use and are dependent upon that use.

The experiments enumerated in this paper may be divided into five classes:

- (1.) Experiments to establish the effect on the clotting of blood.
- (2.) Experiments to establish a cause for delay of healing of wounds where it has been used.
- (3.) Experiments to ascertain the effect on muscular tissue, so that we may understand the contractile effect of the remedy on the circulation and if possible to classify this effect, either the result of a nervous or muscular stimulus.
- (4.) Experiments to determine the dosage to produce.
 - (a) No effect on life processes.
 - (b) A decided effect on life process, but one from which recovery may ensue—e. g. poisoning.
 - (c) Lethal dosage.
- (5.) Experiments to ascertain if immunity is an inherent property of protoplasm, or if there be an immunity.

(1.) Effect on clotting. For this experiment the slow clotting blood of a starfish was used, and for this experiment it is assumed that fibrin is deposited from the serum by the action of some enzyme produced by the action of the white blood corpuscle. If a specimen be dropped on a slide at ordinary room temperature it takes 40 minutes for it to congeal. If the blood be dropped into a solution of .0001 adrenalin in sea water and examined, the coagulation is accelerated and clotting seems normal. The clot is well formed, yet the time is shortened when placed in stronger solution, as for instance .001. The changes noted are:

- (a) The process of fibrin formation is interfered with.
- (b) White cells change character and vacuolize.
- (c) Clotting does not occur.

These experiments in other cold blooded animals, however, produced no change, as in horseshoe crab, or sea urchin.

If these results can be applied to warm blooded animals, it may be assumed that the active principle of the suprarenal gland has no effect on co-

agulation phenomenon and danger from secondary hemorrhage by reason of softening of clot is not increased by its use.

The Effect of Spermatozoa.—The living spermatozoa form a convenient experiment with which to ascertain the effect on the motion of rapidly moving cells. Under normal conditions the spermatozoa of the star fish will stay alive in sea water for hours and retain their contractile power and power of entering the ovum for a longer time. The vitality is directly proportional to its ripeness. If in the solution containing adrenalen, a ripe spermatozoa is introduced the activity is lessened and in 2 hours they die. Weaker solutions effect the bodies quicker, but then they recover more rapidly. Solution of .001 strength kill them at once. A fatal dose being .0005.

Effect on Eggs.—The eggs of the sea-urchin were used. Under normal conditions when these eggs are brought into contact with the spermatozoa in fresh sea water, fertilization immediately takes place. For these experiments it was necessary to dissolve salt in sea water. It was found that development of fertilized eggs is slightly retarded in solution less than .0001. They are killed in 0.001 in sixteen-cell stage and are retarded in all stages.

If these observations be true, it is fair to assume that suprarenal extract solutions have a marked effect on cell division of healing tissue and granulation tissue and it is possible to kill cells and retard proliferation. This accounts in some measure for sloughing and slow wound healing.

Immunity.—Experiments were conducted to prove if an immunity to adrenalen could be developed in fertilized eggs, and they failed to establish the fact of immunity. The vitality of the protoplasm was lowered by adrenalen solution.

Effect on Cilia.—Experiments here are of value because the drug is used so extensively on mucous surfaces level with ciliated epithelium. In solutions of .001 there was an immediate slowing of the motion and almost cessation, and the rate of motion seemed to be proportional directly to the strength of the solution, but on strengths of .000003 there was an increase.

The cilia of the aroncula larvae are effected only by stronger solutions than are necessary to paralyze muscle movement. The next experiments were conducted on cilia of oesophagus of a frog. Solutions of .0001 slowed their movements.

Effect on Contractile Tissue.—The turtle heart was chosen to study the effect on muscle tissue. If the normal heart were removed and placed in salt solution it was found, after an interval of two minutes, in which the beats were not counted, to beat in successive minutes 32, 32, 36, 37 and 37 times. The same heart introduced in suprarenal preparation or salt solution .001, after a proper interval beat 36, 36, 36, 36, 40, 40, 32, 32, 32, 30 times; then ceased gradually. The same heart when placed in suprarenal solution (distilled water) strength .001 beat 13, 12, 13, 13, 14, 13 times per minute.

Another very interesting experiment was on a heart that had ceased beating, but when introduced in .001 suprarenal solution beat 4, 12, 15, 15 and 7 times. This seemed to show a stimulating effect on muscle.

The ventricles were then separated from the auricles, and it is supposed that the ventricle of the turtle heart is without nerve. They lay in the dish without any sign of motion, and when immersed in suprarenal solution .001, it beat 14, 6 and 3 per minute. This appears to show the power of suprarenal gland preparations to cause muscular activity without the intervention of the power of nerve tissue.

In concluding the experiments on lower animals the writer lays down the following:

Suprarenal preparations influence:

- (a) Cell division.
- (b) Ciliary motion.
- (c) Contractile tissue.
- (d) Protoplasm.

The causes leading up to these experiments have been the phenomena observed where suprarenal solutions have been used and the following deleterious effects noted:

- (a) Retarded wound healing.
- (b) Secondary hemorrhage.
- (c) Reactionary symptoms.
- (d) Sloughing.
- (e) Unhealthy condition in general of wounds.

These last few experiences have been, we think, the common experience of all those who have used excessively these preparations and to them such experiments must indeed seem valuable.—*The American Journal of the Medical Sciences*, January, 1905.

WILLIAM F. BAKER, A. M., M. D.

PRIMARY SARCOMA OF THE BLADDER.—Wilder. In the study of literature on the subject and also after a consideration of the three recorded cases the following facts are suggested:

(1) Sarcoma of the bladder is most common after middle life, more than half of the cases occurring after the age of forty years, and also during childhood, yet it may occur at any age.

(2) It is also more common in males than in females, the proportion as 34 is to 13.

(3) The most common symptom in haematuria. The haematuria naturally being suggestive of the occurrence of ulceration and therefore cannot be considered as an early symptom of a growth. It is evident that a growth could exist for some time without haematuria as a symptom, this coming on only with the beginning of ulceration.

(4) Perhaps the next symptom in frequency and of most common appearance is *strangury*, frequent and painful micturition, small stream, retention of urine, pyuria evidences: then of a cystitis or a vesical irritation.

(5) General emaciation is present only in the advance cases.

(6) At times there are calculi associated with the growth, but these are by no means of frequent occurrence.

(7) If the growth be situated near the urethra in the female and it enlarges in the direction of the vagina it may show itself as protruding from that organ and appear at the vaginal opening.

(8) It is a known fact that the disease is more rapidly fatal in children than in adults.

(9) In those cases where the diagnosis has been made early in the course of the disease the neoplasm has been small, single and apparently localized.

(10) The growth may spring from the sub-mucosa of any part of the organ, but the most common location is at the base near the urethral orifices. It is usually sessile, with a broad base; more or less lobulated and very soft. In some cases it has a "cauliflower" appearance. They usually appear singly, but later may become multiple.

(11) Metastases are rare except in advanced cases, this is speaking from a comparative standpoint of metastasis in general of sarcoma.

(12) Varieties found most frequently are:

(a) Round-celled (large, medium, small, alveolar and lympho sarcoma).

(b) Spinale celled.

(c) Mixed celled.

(d) Grant celled.

—*The American Journal of The Medical Sciences*, Jan, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE RELATION OF FUNCTIONAL NERVOUS DISEASES TO FEMALE GENITAL DISTURBANCES.—*Kronig* maintains that a frequent accidental coincidence of hysteria and genital abnormalities has led to the view of a casual relationship between the two. This has brought about an overestimation of the clinical significance of several genital affections such as cervical lacerations, retroflexion, endometritis and posterior parametritis. He does not believe that defective sexual relations induce hysteria; and that masturbation, incomplete coitus and sexual abuses are only rarely causes. Hysteria and neurasthenia do not contra-indicate local gynecological treatment, but may even call for it. As a rule, however, such treatment should be limited. On the other hand it is not true that conservative operations on the genital organs produce an especially severe shock upon the nervous system. The induction of abortion in severe hysteria is only justifiable after complete failure of neurological treatment. Artificial sterility must only be considered in approaching climax, when rapidly following pregnancies have induced serious conditions of depression of the nervous system.—*Frommel's Jahresbericht*, 1903, 26.

THEODORE J. GRAMM, M. D.

DISPLACEMENTS OF THE INTERNAL GENITAL ORGANS NOT ARTIFICIALLY INDUCED BUT DEPENDING UPON A CONSTITUTIONAL WEAKNESS.—*Doleris* believes to be caused by pathological changes in the motor, vaso-motor and trophic nerves. The harmful effects exhibit themselves in the muscles, in the vessels, in the connective tissue, and in the mucous membranes of the genital organs.—*Frommel's Jahresbericht*, 1903, 33.

THEODORE J. GRAMM, M. D.

INTRAPELVIC HEMATOMA FOLLOWING LABOR WITHOUT LESIONS OF THE UTERUS.—*Williams* (Baltimore) has observed a remarkable and somewhat rare case of this accident, and has succeeded in finding thirty-three other cases in the literature. About an hour and a half after a young primipara had been successfully delivered of a rather small child by means of the forceps, she was taken with severe pains about the rectum, and soon presented all the signs of acute anaemia. There was no unusual discharge from the vagina, and only a slight perineal tear. The uterus was firmly contracted, but beneath it and filling out the entire lower abdomen was a firm, round, fluctuating tumor somewhat sensitive on pressure. Since a provisional diagnosis of incomplete rupture of the uterus suggested itself, the patient was subjected to abdominal section, which disclosed the true state of the case, namely that the hemorrhage was subperitoneal. After the

abdominal cavity was partly closed, the blood cavity was cleaned out and packed with gauze, since the bleeding was capillary. From an analysis of this and the other cases found in the literature, it appears that this accident has occurred mostly in primiparae, and the delivery was often easy and spontaneous, which is in marked contrast to the course of labor preceding hematomata due to incomplete rupture of the uterus. It is also interesting to note that the children were somewhat smaller than usual. The mortality was usually extremely high, although since the introduction of modern surgical methods, a distinct improvement is noted. A careful study of a number of cases has also revealed that the hemorrhage is due to capillary oozing. Intense pain about the rectum was a constant symptom. As regards the cause, it is fairly well established that this accident is brought about by the tissues of the birth canal being slowly dragged off from their attachments by the friction exerted by the oncoming presenting part. The greater resistance of the tissues in primiparae makes such an occurrence possible even with a small child.—*Amer. Jr. Obs.* Vol. 50, 442.

THEODORE J. GRAMM, M. D.

PAPILLARY CYSTS AND TUMORS OF THE OVARIES.—In a recent paper on this subject *Pozzi* (Paris) has advanced the following propositions: Papillary tumors of the ovary must not always be considered as malignant. Some of these tumors never undergo malignant degeneration, and do not relapse after removal, or only after a long time, and then but locally without metastases. 2. It is necessary to make a careful distinction between carcinomatous generalisation (through lymphatics and blood vessels) and simple grafts which result from contact and from growth upon the peritoneum of the detached papillary vegetations of the ovary. This latter process is benign and can be compared with what happens with papillomas and warts of the skin. 3. Some of these tumors undergo a malignant process which, limited at first, may afterwards extend all over the mass and at last brings on a real generalisation with cancerous metastases. The practical deductions for the surgeon are: 4. In the absence of positive symptoms of malignancy (cancerous cachexia or visceral metastases) operators must always behave towards these tumors as if they were benign, and proceed to remove the largest extent possible of the neoplasm. The disseminated growths or even small parts of the papillary tumor detached and lost in the peritoneal cavity may disappear. In other cases they will be the origin of local recurrence; but these relapses can be treated successfully by later operations. 5. Frequency of successive invasion of both ovaries by papillary tumors constitutes indication for removal of the adnexa of both sides, even if those on one side are still healthy, at least in women who are approaching the menopause. In young women it would be preferable to venture a new laparotomy. 6. With bilateral papillary tumors operative technique will be greatly simplified by performing subtotal or total hysterectomy, according to the case. 7. Drainage is not necessary when cysts do not present outside vegetations, and when there is no ascites. Every time ascites is present, it is right to drain the peritoneal cavity for some time. In complete removal or even an exploratory incision in inoperable cases is often accompanied by a real diminution of the ascites, with local and general improvement.—*Amer. Jr. Obs.* Vol. 50, 433.

THEODORE J. GRAMM, M. D.

PUS IN THE FEMALE PELVIC CAVITY.—*Stoner* (Des Moines) says there should be but two recognized principles of treating pus in the pelvic cavity, viz: 1. By freely incising the abscess at its most dependent point; keeping it open and drained until cured. 2. Total extirpation of the tissues involved. The history of the case will often enable one to select the proper procedure. Thus a severe infection following labor at term, in which forceps were used, or the parturient canal otherwise abraded, is much more liable to invade the cellular tissue than one following miscarriage and retained secondines. In the latter instance, the seat of the infection is usually the endometrium, and the Fallopian tubes are most likely to become the abode of a purulent deposit. Gonorrhœa of the endometrium is practically always followed by infection of the tubes, usually resulting in a pyosalpinx. The *Gonococcus* nearly always travels upon the mucous membrane by a serpiginous process; seldom by way of the lymphatics, blood vessels or through the tissues by direct contiguity, thus rarely invading the cellular tissue.

He concludes: 1. When pus exists outside the peritoneal cavity, it should be attacked when possible, through an extra peritoneal incision. Such abscesses readily heal after incision and drainage. 2. Abscesses of the tube or tube and ovary combined, are intractable in healing after simple incision and drainage, and are prone to relapse. By such procedure, the immediate mortality may be lessened, but the morbidity is certainly increased. Total ablation is therefore better surgery. 3. Whether the pus is sterile or not, drainage should follow operations in which the peritoneum has been soiled with pus. 4. When vaginal incision is practiced, it must be thorough. Mere puncturing or aspirating the abscess, is a historic relic of surgical impropriety.—*Amer. Jr. Obs.* Vol. 50, 386.

THEODORE J. GRAMM, M. D.

PRIMARY REPAIR OF LACERATIONS OF THE CERVIX UTERI.—Although this procedure has been advocated at intervals for some years past, it has not been universally adopted; and while in accord with the tendencies of modern surgery, it may be questioned whether the operation conforms to good obstetrics. In the unsettled state of the question the article by *Davis* (Philadelphia) is a welcomed contribution, particularly in conjunction with the discussion it awakened in the American Gynecological Society. The author investigated the subject in 53 operated cases. The operation was performed by first cleansing the cervix and vagina with an antiseptic solution, and should hemorrhage be pronounced from the body of the uterus, the operator must delay until the womb contracts or must tampon the cavity of the uterus with sterile or antiseptic gauze. The cervix is then grasped with a tenaculum, and the vaginal walls being retracted, No. 2 chromicized catgut sutures are inserted one-eighth of an inch apart, passing to the mucous membrane of the cervix, but if possible, avoiding it. After antiseptic irrigation, the external dressings are applied. Careful antisepsis must characterize the after treatment. Of the 53 cases operated, good union resulted in 45; fair union in 6; no union in 2, while infection developed in none. He says, moreover, three objections are commonly urged against this operation: first, in cases demanding it the tissues are so bruised and swollen that accurate approximation is impossible and union does not occur. To this he replies that labor cases neglected so long that the tissues get into the

condition named, contraindicated this operation and also the operation upon the pelvic floor. "In the hands of those competent to practice obstetrics cases of labor are not allowed to reach this condition, but are terminated by timely delivery." To the second objection that cervical lacerations heal spontaneously and that immediate repair is unnecessary and meddlesome he answers that small lacerations in uninfected tissue do heal of themselves, but a laceration of more than one-half inch and especially one reaching nearly to the attachment of the vagina do not do so. In replying to the third objection that immediate closure narrows the lumen of the os and hence impedes the discharge of lochia, he points out that the immediate operation leaves the cervix as large as a recently dilated cervix which has not been torn. In conclusion the author says the operation has caused no inconvenience to the mother, and it was usually followed by good results in appropriate cases. The operation is not advised for those who do not practice obstetrics with good surgical technique and who are not competent to operate upon the genital tract.

It will be impossible to give a brief and at the same time satisfactory abstract of the discussion, but the last statement of the author received frequent attention and endorsement. The consensus of opinion seemed to be that the operation in the average general practitioner's hands was likely to be attended with disastrous results, while it might be safely and advantageously performed by those who are competent to operate upon the genital tract and who practice clean surgery; that while rigid local cleanliness would remain the treatment ordinarily, the operation was demanded in those cases where the laceration was so extensive as to injure an artery.—*Amer. Jr. Obs.* Vol. 50, 377.

THEODORE J. GRAMM, M. D.

ALBUMINURIA OF PREGNANCY.—Little (Baltimore) has studied the occurrence of albuminuria in relation to pregnancy as shown in the hospital records of over 900 cases, and particularly in a careful examination of another 100 consecutive cases, and deduces from the tabulated results, that: 1. Albumin is noted in the catheterized specimens of urine from about one-half of all pregnant women, being equally frequent in primiparae and multiparae.

2. Casts apparently occur with greater relative frequency in multiparae, as noted by Zangmeister.

3. At the time of labor there is a marked increase in the incidence of albumin alone and of albumin associated with casts, the increase in each case being specially marked in primiparae.

4. It is not unusual during pregnancy, labor and particularly the puerperium, to find casts present without albumin.

5. Albumin and casts are frequently found during the puerperium, but less often than during pregnancy. It is noteworthy that in no case was albumin present during pregnancy and absent at the time of labor, while there were only three cases showing casts in pregnancy and not in labor. On the other hand, two-thirds of the cases showing casts at the time of labor presented albuminuria during pregnancy.

Other general facts were noted in this study:

In nine cases of threatened eclampsia and in twenty-five of eclampsia, al-

bumin was invariably present. In the latter group casts were present in 22 out of 23 cases examined.

Nausea and vomiting has been noted in 20% of primiparae and in 33% of multiparae who later showed albuminuria, and edema was present in one-third of the cases.

There appeared to be no definite relationship between the weight of the children and the renal condition, though some observers have thought that the dystocia resulting from excessive weight of the children predisposed to albuminuria. So also was no relationship discoverable between the presentation and the position of the children.—*Amer. Jr. Obs.* Vol. 50, 32.

THEODORE J. GRAMM, M. D.

PRIMARY GENITAL TUBERCULOSIS IN AN INFANT.—*Renaud* reports a case in a four year old child having an ulceration on the left labium majus about the size of a bean. The edges were but little infiltrated, sharp, not undermined, the base greyish yellow. The small labium was involved in the growth, and in the inter-labial cleft are noticed two small whitish points which projects somewhat above the mucous membrane. The inguinal glands were not involved and were painless. The diagnosis lay between necrosis due to malnutrition, soft chancre, and tubercular ulcer. The ulceration was only three days old. Microscopic examination of the secretion revealed a large number of tubercle bacilli in addition to colon bacilli. From iodine and iodoform treatment the ulceration rapidly healed. No manifestations of tuberculosis were found in any other part of the body, so that the author believes his case to be a primary tuberculosis of the labium.—*Zentralbl. f. Gyn.* 1904, 34, 1029.

THEODORE J. GRAMM, M. D.

RUPTURE OF THE UTERUS WITH DEATH FROM LARGE POST PARTUM HEMORRHAGE.—Quite an unusual case is reported by *Dauber*, who exhibited the pathological specimens from a 28 year old Vpara who died on the eleventh day post partum from hemorrhage. The labor and puerperium were said to have been normal, but on getting up on the eleventh day the patient suddenly died from hemorrhage. The autopsy revealed a rupture of the uterus extending into the left parametrium which was still eleven centimeters long. Within the rent a vessel was found from which a thrombus is believed to have been loosened when the patient arose from bed.—*Zentralbl. f. Gyn.* 1904-36-1085.

THEODORE J. GRAMM, M. D.

INTESTINAL PERFORATION AND PERITONITIS IN TYPHOID FEVER.—*Haggard* (Nashville) says the immortal phrase "The resources of surgery are rarely successful when practiced upon the dying," has been most wonderfully negatived in the operative treatment of perforative peritonitis in typhoid fever. It is estimated that 25,000 deaths occur yearly from this accident in this country, and on a basis of a possible 30% recovery by operative intervention it is probable that 7,500 persons perish in the United States each year, who might be saved. One reason is the reluctance with which the practitioner invokes the aid of surgery in the presence of such forbidding general symptoms. Another is the likelihood of death even with operation; but the greatest of all is the difficulty of making a positive diagnosis in the early

stages. The symptoms usually mentioned as indicating perforation, pinched features, cold sweat, feeble pulse, short sighing respiration, distended and motionless abdomen, are really late and lethal manifestations of peritonitis and not of perforation. Some cases are fairly typical, but others presenting such presumably typical symptoms are found not to have perforation. Again, peritonitis may be the first symptom. In the case of a patient in the third week of a mild attack, without abdominal symptoms and pursuing a regular course, who is suddenly seized with an acute paroxysmal pain in the right lower quadrant of the abdomen that causes him to cry out, that is unrelieved by ordinary measures, followed by collapse, subnormal temperature and rapid pulse, which is succeeded by a rise in temperature in a few hours, associated with continued pain, considerable tenderness and right sided tenderness, together with a rapidly increasing leucocytosis, the diagnosis of intestinal perforation is reasonably certain—not absolutely—but surgically, and such cases should be operated. The difficulty is that all cases do not present this typical grouping. Study of the reported cases develops that a sudden severe, colicky pain is present in a large majority of cases. Collapse is an infrequent attendant of perforation. Fall of temperature was not constant, but rise in pulse was rather uniform. Of the physical signs tenderness was found to be the most constant. Studied in the order of their development and more especially their significance it was found that pain, then tenderness, then rigidity and then localization in one spot occurred. Persistence of symptoms serves to distinguish them from colic, which should disappear in a few hours or change its location. Exploratory incision should be regarded as a necessary and final aid in diagnosis. The facts deduced from statistical study may be summarized as follows: 1. Perforation occurs in 81% of men, and in 19% of women. 2. It occurs in about 2.5% of all cases of typhoid fever. 3. From the figures given it is seen to occur more frequently in the third week, though it has been observed as early as the tenth day. 4. It naturally occurs more frequently in severe attacks, but may attend mild attacks, and it may be the first real symptom of so-called walking typhoid. 5. In 95% of cases the ileum is affected usually within 18 inches of the cæcum. 6. The perforation is usually single, though multiple perforations have been observed. Cases with diarrhoea and tympany are more likely to suffer this accident. In some cases it occurs with hemorrhage. 7. The death rate given by Murchison is 90% to 95%. Osler says that he could not recall a single case in his experience that had recovered after perforation had occurred. Occasionally with careful endeavor to correctly interpret the signs aright, no lesion has been found. This has been done by the most expert, and will sometimes happen until we devise some absolute early sign. It has been demonstrated that these patients will bear the surgery necessary to make a positive diagnosis in suspected and doubtful cases. It is surgically immaterial whether a perforation exists or not if there is peritonitis. The author reports some cases and discusses the technique of the operation.—*Amer. Jr. Obs. Vol. 50, 368.*

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.,

with the collaboration in German literature of Oscar Boericke, M. D.,
and in French literature of Charles Platt, M. D.

HEPAR IN SUPPURATIVE INFLAMMATION OF THE NOSE AND THROAT.—Dr. Ella G. Hunt says that it was in suppurative conditions in the nose and throat that she first learned to recognize the great value of Hepar as a medicine. Last winter one of the most distressing secondary symptoms of influenza was the tendency to the formation of abscesses. The joints and alveolar processes were often attacked, and in such cases as well as in acute sinus disease, both of the frontal and sphenoidal cavities, this writer found Hepar of great value. Even in some chronic cases it relieved the distressing pain, the dizziness, loss of smell and so on; reducing the swelling of the mucous membranes and thus permitting better drainage.

Dr. J. S. Mitchell considers Hepar our best remedy in the chronic laryngitis of professional singers. He feels confident that with this remedy he can not only reduce the inflammation, but that there will also be marked and manifest improvement in the quality of the voice.

GERANIUM IN PASSIVE HEMORRHAGES.—W. B. Webb, M. D., in *Medical Visitor*, thinks that the principal indication for the use of Geranium tincture, in hemorrhages, is the *passivity* of the flow. It does not seem suitable to active hemorrhages. The amount of the blood lost does not matter as much as the character of the bleeding. Passive hemorrhage then, is the indication.

HEART FAILURE DUE TO ACUTE INDIGESTION.—It is a well known fact that very serious cardiac weakness with symptoms of rapid prostration and collapse may follow acute indigestion and acute autotoxaemia. Dr. L. R. Markly, in *Northwest Medicine*, has collected some very striking examples of this condition. He recommends particularly *Glonoine* administered hypodermatically.

A Mr. L., whom this physician had known to be a healthy man with normal heart and normal lungs, was taken very ill at midnight after eating freely of pickled smelt. He vomited and had considerable abdominal pain. The physician gave him a quarter grain of morphia. Suddenly, while the doctor was sitting by the bedside, his patient passed into a state of collapse and died before anything further could be done for him. Another man, aged 65 years, subject to dyspeptic attacks, sent for Dr. Markly early

one morning for an attack of abdominal cramps and diarrhoea. The feature of this attack was the profound weakness and collapse. Restoratives relieved him and he afterward went to California. While there he had a similar attack to the one just described and died suddenly. A Mrs. B., subject to bilious headaches and flatulent indigestion, suffers with great heart weakness and collapsic symptoms whenever she has one of her attacks. Glonoine tablets relieve her better than other remedies. The important point about this paper is the statement that physicians should recognize the possibility of serious and even fatal cardiac weakness during attacks of acute indigestion and acute autotoxaemia. *Glonoine* should be remembered also as a valuable remedy under such circumstances.

SOME MEDICINAL THERAPEUTICS FOR AFFECTIONS OF BONES.—In a paper upon "Affections of the Bones," Dr. Laura B. Hurd gives the following indications for remedies:

Angustura, 3x.—Where necrosis of the bones of the hand exists. This was proven valuable in an old sinus in one of the clinic cases, where the use of this remedy, in a few weeks, without surgical intervention, permanently closed an old suppurative area.

Calc. fluor, 3x.—In rachitis, especially where enlargement of femur is present. Leg very sensitive to touch, with hardness of surface, and usual Calc. symptoms are found.

Symphytum.—Recent bone injury, contusion or fracture; pain pricking in character, with soreness of the periosteum. Aids in detachment or sequestrum in necrosis.

Ruta, 2 x.—For bone pains where tendons are sore and extreme weakness of the knees exists.

Phos, 3x.—Its power of causing osteitis and necrosis is a practical guide to its use; its usefulness in rickets is because of its power of exciting osteogenetic activity.

Iodine.—Will diminish suppuration and assist in preventing the development of hectic fever in necrosis. Striking effects come from its use in rickets.

Kali, iod, 3x.—Where periosteum is inflamed and in indolent wounds.

Gels, 3x.—To control many of the nervous symptoms and high temperature arising therefrom.

Silicea.—Urges the importance of tissue remedies. Where suppuration has taken place; great sensitiveness of surface and tendency to increased cartilage in rachitic affections, 12 to 30th potency preferred.—*Pacific Coast Journal of Homoeopathy*.

HOMOEOPATHY SHOULD BE PROPERLY TAUGHT.—Dr. Royal S. Copeland, in *Progress*, discussing The Homoeopathic College, expresses the belief that much of the teaching in the homoeopathic college, must be exactly like the teaching in the colleges of the other schools of practice. Our students are not physicians; they are laymen as yet, and must be taught all of the details of a great and growing art. When they have mastered these details they are prepared to appreciate the fine distinctions of the homoeopathic specialty. To know and perhaps to employ general measures which, though they may not influence the disease, undeniably promote the comfort of the patient, should make one no less a loyal homoeopath. To be versed in the

bacteriological, chemical and pathological sciences should not be an excuse for the finger of scorn. It is not until the homœopathic teacher *habitually* proposes remedies, actually looking to the cure of disease by some drug action different from that recognized by our practice, that he becomes a traitor to our cause. As a matter of good taste and in harmony with the proprieties, the teacher in the homœopathic college should guard himself against careless, routine and general prescribing. No matter what his practice may be in his private work; in his official capacity, where he is the representative of a distinctive school, he should on every occasion make his prescription in the most careful, painstaking and exact manner. Unless he is willing to study his patients, with the homœopathic prescription in mind, he is too careless, too lazy and too valueless to be retained in his position. Unless he is daily impressing his students with the efficacy and efficiency of the homœopathic principle, he is out of place in the homœopathic college. Homœopathy is a living reality to be perpetuated by the enthusiasm of live exponents. Shame upon any teacher who wears the mantle, but has not the faith nor the courage to proclaim the doctrine.

PICROTOXIN THE COMMON INGREDIENT OF KNOCK OUT DROPS.—The *North-west Medicine* editorial upon the topic "Knock-out Drops," is very apropos of the numerous deaths from what has been supposed to be in police circles, acute alcohol poisoning. In a recent paper, published in *St. Paul Journal*, the writer states that the drug commonly used in these knock-out drops, is not chloral as we had supposed, but *picrotoxin*. This has been termed by those who use it for the nefarious purpose mentioned, "extract of hazel nuts." Added to whiskey, it sometimes produces symptoms rather similar to the poisonous effects of the more familiar strychnine; convulsions being followed by delirium and coma. Its symptoms are more or less modified by those of the whiskey, so that the victim may show similar effects to those which might be produced by an overdose of alcohol. Profound stupor and unconsciousness might lead one to suspect alcoholic poisoning alone; and, delay in the application of the proper antidotal measures might result in death. These facts should receive the careful attention of all physicians.

DRUG TREATMENT IN THE LATER STAGES OF PHTHISIS.—At the November meeting of the British Society, Dr. W. T. Ord stated that providing the lungs alone were affected, cure need not be despaired of. The usual remedies employed in the earlier stages of phthisis have not been found effective in these later periods of the disease. *Iodine* 1x. five drop dose in milk, was recommended in conjunction with the administration of *Stannum iod.* 2x. trituration; one to three grains after meals. Open air and super-alimentation were also recommended as aids to the former treatment.

THLASPI BURSA PASTORIS.—No list of remedies for the various conditions arising during the change of life would be complete without this agent, for it has a field specifically its own, and that in those conditions in which the menstrual flow is too frequent and too profuse. Capsella may be given without fear of failure, if no organic lesions nor malignant states are present. It is called for in chronic menorrhagia when the long-continued discharge is constant and almost colorless.—Dr. Lyman Watkins, in *Hom. Jour. of O. G. and P.*

THE MEDICAL TREATMENT OF PAINFUL MENSTRUATION.—William Roche, L. R. C. P. I., M. R. C. S., England, in the *Journal of the British Homœopathic Society*, speaks very encouragingly of the following remedies: Caulophyllum—He has used this remedy in 26 cases, giving the lx. every two hours during the time, and three or four times a day during the intervals. Lately he has used the lx. of the caulophyllin in all recent cases with excellent results. Collinsonia canadensis, in the lx. or 3x, has seemed to suit stout, plethoric patients where constipation and often piles gave trouble, and where distressing pruritis was also present. Gelsemium, lx, or tincture, has been useful for intolerable pain, causing hysteric feelings and great restlessness. Hamamelis was the best remedy for dysmenorrhœa with free loss and soreness and tenderness in the ovarian regions. Actea racemosa, given during the inter-menstrual period, was successfully used in cases of a rheumatic or neuralgic character. Severe headache before the menses came on, spinal pain and tenderness and very low spirits are its indications. Xanthoxylum has great despondency and irritability, a frightened, nervous feeling, with profuse menstrual flow and great pain. Suitable in higher potencies. In lower potencies it brings on the menses.

THE ACTION OF ADRENALIN IN ARTERIO-SCLEROSIS.—Adrenalin has, in the healthy man, a constant effect upon the arterial tension. The 1-16,000,000 of a gramme injected into a peripheral vein determines, almost immediately, a considerable elevation of pressure, lasting for three or four minutes, and followed by a period of hypotension below the initial one. Adrenalin constantly causes diminution of red globules and increase of leucocytes. It produces, therefore, anæmia. Glycæmia and glycosuria are also produced by adrenalin, and it has caused the classic lesions of chronic aortitis. According to the law of similars, adrenalin would be indicated in arterio-sclerosis and particularly in aortitis, in anæmia and in diabetes. Guided by this law, I have been using the hydrochloride of adrenalin for several years, in the sixth decimal dilution of this 25 centigrammes are mixed in 200 grammes of water, and a teaspoonful given every morning and evening. In a case of extreme sclerosis this remedy was successful. In another case of hæmophilia it prevented the hæmorrhages, although the child still had ecchymoses. In a gouty man, aged 55, subject to frequent crises of angina pectoris, the remedy cured these attacks, after the iodide of sodium had failed. In two cases of chronic aortitis notable amelioration was obtained. P. Jousset, M. D., in *Revue Homœop. Fran.*, translated in *Monthly Hom. Review*.

ON THE MODE OF ACTION OF DRUGS IN CRUDE AND DILUTE FORMS.—Dr. Charles Gatchell, in his scholarly paper before the Institute, concludes that, the action of concentrated solutions of medicinal substances in the animal system is the action of the *molecules* of the substance. The effect of the action of these molecules is to depress function and to disturb nutrition, and represents primary action. The action of dilute solutions of medicinal substances is the action of the *ions*. This action of the ions is to stimulate function and to promote nutrition, and represents the secondary action.—*The Clinique*.

EUPATORIUM PERFOLIATUM.—Dr. Gordon W. Hoyt, in *North American Journal*, is very emphatic in his statement that eupatorium perfoliatum will cure intermittent fever of tertian type, beginning at a morning hour, between seven and nine o'clock. The chilliness begins in the back; there is thirst before and during the chill; no sweating follows the hot stage; intense aching in bones, muscles and sinews. He also favors the eupatorium as a remedy for influenza, when intense frontal headache, as well as occipital aching, heaviness and soreness of eyeballs, similar to bryonia, prevail. Eupatorium is restless and not aggravated by motion, as in the latter remedy. The dark-red face of eupatorium is similar to both bryonia and gelsemium, but eupatorium will likely show some yellowish tint of skin and sclerótica. The soreness and lameness of the chest, with rawness behind the sternum in bronchi, causing cough, is also eupatorium as well as bryonia.

The gastro-hepatic group of eupatorium symptoms are very important. Intense headache, soreness and yellowness of the eyes, jaundiced hue of skin, bone-pains and soreness in liver region; nausea, vomiting of bile, constipation. Such symptoms show its relationship to certain liver disorders. No sweating follows the fever of eupatorium. This is unlike bryonia, which remedy has free sweating.

MALIGNANT DIPHtheria.—Dr. J. W. Pierce says that the following remedies should be remembered for diphtheria, when the horrible odor is the pronounced feature: Baptisia, Carbolic acid, kreosote, lachesis and mercurius syanatus.—*N. A. Journal*.

ILEUS: THE REMEDIES THAT HAVE BEEN SUCCESSFULLY USED.—Dr. H. F. Biggar's valuable contribution to the American Institute, upon this important subject of bowel obstruction and its management, contains some valuable suggestions regarding the medicinal therapeutics which should be followed. No cathartics should be used. Lavage of the stomach is beneficial; likewise lavage of the colon. These procedures will possibly prevent sepsis. Belladonna, both internally and externally, may be used. Internally, enough belladonna to produce, if necessary, atropism; even 10 or more minims every hour until the throat becomes dry and the pupils dilated. If necessary we may add 1-grain suppository of belladonna hourly. It seems necessary to obtain the relaxing effect of the drug upon the circular muscular fibres. Externally, we can apply an ointment consisting of 1 drachm extract belladonna, 1 ounce iodine ointment, or, extract of belladonna and of opium; of each, 25 grains, triturated with 1 ounce of glycerin. This latter is to be painted upon the abdomen. Tabacum, 2x, may be given internally; while rectal enemas of 1 drachm of plug tobacco to the pint of water are used. Another rectal enema consists of a pint of water containing ox-gall, 1 or 2 ounces, and glycerin, 2 to 4 ounces. Former Surgeon-General M. O. Terry claims that the following prescription has been used for more than twenty-five years and that it has never failed. Two formulæ are given: 1. Atropia, 1-60 grain; sulphuric acid, 10 drops; tincture of orange peel, 1 drachm; sulphate of magnesia, 1 drachm; water, ½ ounce. Prescription No. 2 is the above *without* the atropia. This dose of No. 1 is given, and then one dose of No. 2 is repeated every three hours. If no throat symptoms, such as dryness, appear, another dose of the No. 1 may

be given in twelve hours; otherwise not until twenty-four hours have passed. This treatment is continued for days, the patient always improving, and ultimately recovering. This is very positive testimony. Dr. Biggar, however, says that if the case of bowel obstruction is an operable one, the earlier the operation is performed the better for the patient.—*N. A. Journal of Homœopathy.*

NON-OPERATIVE TREATMENT OF MASTOIDITIS.—Frederick H. Colburn, M. D., believes that in a considerable number of cases of mastoiditis, conservative treatment is a safe and advisable procedure. To be of avail, non-operative treatment must be instituted early, before necrotic changes have taken place within the mastoid or tympanum. This author evacuates the tympanum of the fluid within by a free semi-lunar incision; then applies cold by means of the Leiter's ear coil. The canal is thoroughly cleansed with sterile cotton and dioxide of hydrogen. Hot, sterile irrigations of water may be applied for ten minutes at a time, at intervals of from one to four hours. The writer also thinks that medicinal treatment should go hand-in-hand with these local measures.

In the early stages of the affection, perhaps the most frequently indicated remedy is belladonna. The flushed face, the throbbing pain in the ear, the throbbing frontal headache, the dilated pupils, the sensitiveness of the eyes to light, the high temperature and the sero-sanguinous discharge are all good indications for this remedy. Ferrum phosphoricum resembles belladonna, but has for its keynote that peculiar *hammering* which accompanies each pulsation with a distinct blow and frequently with a pain. Capsicum is highly recommended and comes in at a later stage than belladonna. Tenderness and pain in the mastoid, a thicker aural discharge, more yellowish in color, would distinguish this remedy. If the case progresses, hepar, pulsatilla, mercurius, silica and kali muriaticum are of especial value.—*Homœopathic Eye, Ear and Throat Journal.*

Proceedings of the Fortieth Annual Session of the Homœopathic Medical Society of the State of Ohio. A volume of excellent papers, many of which have already attracted wide notice in the monthly periodicals of our school. The discussions are full of interest. Altogether this is a commendable report, worthy of the wide-awake, active society which it represents.

Transactions of the Fortieth Session of the Homœopathic Society of the State of Pennsylvania.

The success of the fortieth session of the Homœopathic Society of the State of Pennsylvania was evident, not only in the attendance, but also in the character of the papers presented. The present volume contains many articles which reflect credit on their authors and which will be of practical value to the profession.

THE HAHNEMANNIAN MONTHLY.

MARCH, 1905.

THE CONTINUANCE OF HOMŒOPATHY AS A DISTINCTIVE SCHOOL OF MEDICINE.

BY J. HERBERT MOORE, M. D., BROOKLINE, MASS.

(Read before the Maryland State Homœopathic Medical Society, October 18th, 1904.)

MR. PRESIDENT AND MEMBERS OF THE SOCIETY:

It is with genuine pleasure that I accept your very kind invitation to address the Maryland State Homœopathic Medical Society upon this occasion of its semi-annual meeting, enabling me, as it does, to speak with as well as to you, its members.

In the selection of my subject I have been guided by your worthy President's request, and I shall speak to you this evening upon the theme: "The Continuance of Homœopathy as a Distinctive School of Medicine." While consenting to do so I am mindful of the masterful presentation of your President's address along these lines to your society last May, and it is only in compliance with such request that I presume to glean in the field in which he has so ably reaped.

In the consideration of this subject I shall attempt to show why such a continuance is not only justifiable on account of the attitude of the old school of medicine toward homœopathy and its practitioners, but is necessary for the best good of those principles and tenets for which homœopathy stands.

In judging the attitude of old school medicine toward homœopathy and its practitioners we must distinguish between individual and collective cases. So far as individual cases are

concerned a great difference will be found in different parts of the country, and even in different communities of the same part of the country, dependent here upon some special environment, as for instance a hospital in which both old school and homœopathic physicians equally and harmoniously work. There can be no question but what, generally speaking, there exists in the West a better understanding between individual members of the two schools than in the East; and in both West and East we are pleased to note that many practitioners of both schools can sincerely claim members of the other medical camp among their professional friends. But as this is a country in which majorities rule, the verdict of the attitude of old school medicine toward homœopathy must be rendered in accordance with the attitude of those collective cases making up their different societies and their national association.

A candid, yet perfectly fair, summing up of an examination into this attitude reveals the fact that there are three slogans which have been invariably uttered by official old school medicine, whenever it has considered anything pertaining to homœopathy or its practitioners, and these are: regular, dogma, and sectarian; regular as applied to themselves, and dogma and sectarian as applied to us. The fact is at the same time revealed that these slogans have never rallied to the detriment of homœopathy, but have invariably proved a war-cry merely serving to deafen their own ears and to dull their own understanding against a recognition, or even a realization, of the legitimate claims of homœopathy, and to turn them away from any investigation of these claims, or even a desire for the same, in any degree of fairness or liberality.

Although these are positive statements I wish it to be thoroughly understood, at the outset, that they are uttered in not the slightest partisan spirit so far as the objectionable significance of this term is concerned, nor with any desire or intent that they widen in the least the long-standing breach which, at the present time, seems to be gradually closing up between the dominant schools of medicine. Rather are they uttered for the purpose that our treatment of this healing process may be sufficiently intelligent and healthy, as that the ultimate closing up of the same may be that of an ethically even and perfect union.

The revision of its code of ethics by the American Medical Association at its annual meeting held in 1903, resulting in the

substitution of the "Principles of Medical Ethics of the American Medical Association," is naturally of interest to the homœopathic school of medicine, and especially so as regards that section relating to the action taken concerning its ethical relations with the other dominant school of medicine.

In order to appreciate the real significance of this revision let us turn to their code of ethics in force up to their meeting of last year. This code, as you all know, was adopted in the year 1847, and we find in section 4, paragraph 1, that portion relating to their position concerning ethical relations with physicians not of their kind. In this section, after stating that a regular medical education should constitute the only acknowledged right of a physician to the exercise and honors of his profession, it goes on to state: "But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry." You will notice the emphasis given in this code to the first two expressions of regular and dogma to which I have referred.

The State has stepped in and defined by its courts of law that which constitutes a regular physician, thus eliminating any efficient claim upon this title by the old school of medicine, and in fact eliminating all claim to its self-styled title of regular save on the ground of self-sufficient egotism. We trust that it is its appreciation of these facts which has led the old school of medicine to omit this term of regular from their new principles of ethics. If so we sincerely congratulate them upon their refusal to longer claim a monopoly of this meaningless term when applied exclusively to either school.

The old school could and would be as sincerely congratulated if it would bring itself to discard the equally meaningless designation of dogma in their official and individual references to us; the significance of which so often appears under the term of sectarian system of medicine, an expression as meaningless as the two other expressions of regular and dogma when applied to the homœopathic school of medicine.

It is not my purpose to take up your time to-night by an analysis of this old code which has been questioned so many times and so ably by our own practitioners of the past, nor to follow along the history of the working of this section of their

code during these many years, showing how far it has missed the mark of injuring homœopathy and its practitioners in the eyes of the public which was the real purpose of its adoption. Neither is it my purpose to demonstrate to what an extent their realization of this miscarrying of the purpose of the old code, or the moral pressure which the fair-minded public have brought to bear upon them, or yet again to what an extent the matter of expediency on the part of their own physicians, has actuated their change of attitude toward consultations with homœopathic physicians; motives which it is impossible for us not to recognize when we consider that neither fellowship nor recognition goes hand in hand with the passive removal of the barriers against consultations as we find it implied in the following generalities contained in Article 3 of Chapter 2 of their new "Principles of Medical Ethics of the American Medical Association" under the caption of "The Duties of Physicians in Regard to Consultations," and which read as follows: Section 1. "The broadest dictates of humanity should be obeyed by physicians whenever and wherever their services are needed to meet the emergencies of disease or accident." Section 2, "Consultations should be promoted in difficult cases, as they contribute to confidence and more enlarged views of practice."

Whatever their motives may have been which led up to their excluding the ancient barrier against consultations from their new principles of ethics, or the method thereof, the rights of the public so prominently figure in this matter that the importance of mutual consultations among all reputable physicians is too great for us to withhold our concurrence, in the result obtained, on account of our questioning either motive or method. Consequently we unhesitatingly add our seal of approval to this action of the American Medical Association so far as it tends toward mutual consultations among all reputable physicians, and recognize in it a long stride in the right direction.

But when it comes to a question involving the vitality and perhaps the very life of all that for which homœopathy stands, and you know that I now refer to the matter of amalgamation with the old school of medicine, ours is not only the right but the duty to thoroughly understand the motives which old school medicine has in treating with us concerning consultations, amalgamation, or any other matter, and to understand not only its present attitude toward homœopathy and homœo-

pathic practitioners but what its attitude would be after such amalgamation had been consummated.

We look in vain to these new principles of ethics for any information as to what this attitude of old school medicine should or will be, and we find beyond the mere dropping of the old anti-consultation section no further reversal of the long-established position of its national association concerning ethical relations with homœopathic practitioners, inasmuch as the American Medical Association has left to the state associations all matters relating to these relations. This action we find expressed as follows, in the explanatory preface of the new principles of ethics contained in the accepted report of the special committee to whom the revision of the old code was referred: "The committee, for this reason, (the resemblance which the relation of the American Medical Association to its constituent state associations bears to the relation of the United States to the several states) regards it as wiser to formulate the principles of medical ethics, without definite reference to 'code' or penalties, thus leaving its several states to form such code, and establish such rules as they may regard to be fitting and proper, for regulating the professional conduct of their members, providing of course, that in doing so there shall be no infringement on the established ethical principles of this Association."

It is evident from this action that we are to look to the various state associations, if we would ascertain the ethical attitude of official old school medicine toward homœopathy and its practitioners.

The verdict of these state associations does not promise to be reassuring. For instance, the Council of the New York State Medical Association prepared and approved a revision of the old national code, and instructed its delegates to present it to the House of Delegates of the American Medical Association at the Saratoga session of 1902, as their embodiment of what the national association should adopt as its revised code of ethics. In Chapter 2, Article 4, of this proposed revision, under the caption "Of the Duties of Physicians in regard to Consultations," we find the sections relating to consultations and other ethical relations with physicians not of their kind to read as follows: (Sections 1 and 4 read the same as the two sections contained in the new principles of ethics and which I read to you above.) Section 2, "The good of the patient being

the sole object in view, any physician having a license to practice medicine conferred by a medical board authorized by the state may be aided in consultation." Section 3, (and this is the section to which I want to especially call your attention as containing the old familiar designation and the penalty attached thereto), "No physician who indicates to the public that his practice is based on a sectarian system of medicine shall be entitled to professional fellowship or to recognition in medical bodies."

Although this proposed revision was not adopted by the national association, a compromise having been effected resulting in the substitution of the new principles of ethics referred to above, I present these two sections relating to consultations and other ethical relations, representing as they do the majority opinion of the New York State Medical Association, at least two years ago, as indicative of what we are to expect from less enlightened state societies than this representative one of the "Empire State."

This cap of "sectarian system of medicine," though meant for us, does not fit us, and the old school profession would realize that it does not if they would acknowledge that a homœopathic physician is a regular and reputable physician, and one who adds to his knowledge and practice of general medicine a special knowledge and practice of homœopathic therapeutics.

The old school concedes to physicians the right to engage in a special knowledge and practice of every other legitimate department under the medical sun, from surgery and the various other specialties requiring mechanical technique to electrotherapeutics dependent upon the application of certain principles of electrical action; but when it comes to a special knowledge and practice of drug-therapeutics dependent upon the application of certain principles of drug action, providing it happens to be the homœopathic principle of drug action, then must excommunication at once follow.

All this indicates that in the eyes of the old school of medicine one cannot practice in accordance with the homœopathic principle of drug action, which is as much a reality and very much more specific and curative than any principle of electrical action, without indicating to the public that this practice, although engaged in as an addendum to all the qualifications of general medicine, is a narrow and exclusive "sectarian system of medicine." This is why this section of the new code

proposed by the New York State Medical Association was intended to apply especially to us; and, then again, we would recognize it as such, and from out of the past, on account of its familiar context.

In the face of the spirit of this flat refusal of professional fellowship or recognition to homœopathic physicians, no intelligent and fair-minded judge or jury would ascribe the action of old school medicine in declaring for either open consultations or amalgamation to motives prompting in the slightest degree our welfare in the future or atoning in the slightest degree for injustice in the past.

With a realization of this fact in his mind the questions, which were directed to the old school of medicine by your President in his address of last May, asking what our status would be when received into the fold of amalgamated medicine, were as potent as the replies of the editor of the *Maryland Medical Journal*, as found in the July issue, were patent.

Let us give a few moments to a consideration of a portion of this editorial replying to your President's address, in order that we may appreciate the attitude of the old school of medicine from the individual point of view. Before doing so allow me to say that Dr. Price is to be congratulated and the generous editor commended for the deserved and kindly expressions, concerning your President, contained in the opening of the editorial.

But when it comes to a consideration of his conception of homœopathy, as outlined in the editorial, it is to be sincerely desired that this old school physician and all colleagues associated with him in his national association were as well informed as to the principles and practice of homœopathy, and the aspirations and aims of its practitioners as he himself is plain and candid as to the relation which homœopathy and its practitioners would bear to old school medicine after the latter had absorbed ourselves and our principles.

The following extracts from this editorial so clearly indicate this relation, as well as the motive leading up to a revision of the old code of ethics, that I quote: "Our permissions and expectations have so often been brought to naught by men in our own ranks, that we dare not say what we shall expect or permit our homœopathic friends to do with liberated faculties. Dr. Price's question cannot be answered except by experiment." "Dr. Price believes that the homœopathic law of

therapeutics is an important part of medical truth. If such it be, and if it can be engrafted and made to grow upon the body of accepted scientific truth, then the faith of the homœopathist will indeed be engulfed and his distinctive marks obliterated." "We are of the opinion that any considerable movement of the homœopathists toward affiliation with the 'regulars' would not yield them any advantage as a party." And now as to the motive, I quote again: "We are not prepared to ascribe a very virtuous quality to the act of removing them. It is doubtful if we were actuated by a deep sense of justice; but it was not an indifferent act, and certainly not a party manœuver. It is not surprising, however, that the homœopathists are inclined to scrutinize the deed from a party standpoint." "We have not removed the barriers in the belief that the distinctive homœopathic faith can or will or ought to be planted in our field."

We pass over these quotations without comment, as they speak for themselves with sufficient distinctness.

It is with the following quotations that I desire to pause to take issue, not in any controversial or antagonistic spirit, but to sincerely show to what an extent the cause and purpose of the existence of homœopathy, and the position, relative to general medicine, which homœopathic practitioners hold, are misjudged by the old school of medicine. These quotations, after referring to the life or death of our faith being dependent upon its vitality, a sentiment to which we heartily subscribe, go on in this wise: "In either case whether the faith increases or declines, the 'practical' significance of the sectarian name must fade. To the individual 'homœopathists' the practical value of the designation can be as certainly destroyed by universal adoption as by unanimous rejection, and the only way to preserve it is to circumscribe its growth within party lines. For the fully persuaded adherent of homœopathy the question appears to be whether he shall risk the disintegration of his party for the sake of propagating his faith. The conditions upon which he may do so are not quite so simple as they appear. Besides being a legally qualified practitioner he must profess that his practice is not based upon an exclusive dogma and he must announce himself to the public simply as a physician."

The real purpose for which homœopathy exists is not a consideration of the practical value of its name, nor a desire to preserve it in any partisan spirit or to serve any unworthy

partisan end. Rather is it the purpose of homœopathy, and that which has been its constant incentive, to develop and promulgate its principle of drug action and the essential tenets bearing upon this principle. In view of this fact no one, who is acquainted with the experience of our practitioners, even up to a quarter of a century ago, in encountering the bitter medical ostracism of those days and its intended effects upon the public, can gainsay this purpose; and no statement will be in accordance with fact which imputes to the practitioners of homœopathy a maintenance of its organizations for more rapid advancement, financial gain, or any other sordid partisan motive as constituting in the least the aim or purpose for which homœopathy exists. In fact, this very propagation of his faith constituting the life-work and mainspring of homœopathy, demonstrates that the question for the adherent of homœopathy is the very antithesis of the question quoted; inasmuch as the question for the homœopathic practitioner to settle is not "whether he shall risk the disintegration of his party for the sake of propagating his faith," but whether he shall risk the propagating of his faith in the hands of the old school of medicine after the disintegration of his party, which would surely occur if affiliation were consented to by us on the terms laid down by them.

Let us now give our attention to the last clause of these quotations which, with your permission, I will repeat: "Besides being a legally qualified practitioner he must profess that his practice is not based upon an exclusive dogma and he must announce himself to the public simply as a physician." I have already extended our congratulations to the old school for at last recognizing us as regular physicians, which is only another name for legally qualified practitioners; and have already professed that our practice is not based upon an exclusive dogma and that it does not consist of a sectarian system of medicine, in their implied meaning of the term, inasmuch as our special practice of homœopathic therapeutics has been officially stated by our national society to be not a subtraction from, but an addendum to our qualifications as general physicians.

That a homœopathic physician, or in other words a believer in and practitioner of the beneficent results of homœopathic therapeutics, must not allow the public to become cognizant of this fact, under penalty of loss of ethical standing in his pro-

fession on the ground that he has announced himself to the public otherwise than "simply as a physician," is a demand as unworthy as it is ridiculous; and for this reason is a demand to which we shall never be able to accede.

Their demand amounts to this: We accept their overtures to go over into the old school camp; a very respectably large and intelligent proportion of the public still desire homœopathic treatment; they ask us if we still believe in and continue to practice what they desire and that for which they are seeking; we are told to answer them by switching on the ethical graphophone: "We are simply physicians, no homœopathic help here."

It would be no more futile or ridiculous for the old school of medicine to add another section to their code, decreeing that no one of them practising in the field of surgery, otology, or electro-therapeutics shall be known to the public as a surgeon, aurist, or electro-therapeutist; and that any one professing to stand as such before the public shall be deprived of fellowship and recognition among them, because such an one has announced himself to the public otherwise than "simply as a physician." This they never would or could do, and yet believers in and practitioners of the special field of homœopathic therapeutics must pay the price of renunciation of all such belief and practice, for the purchase of professional fellowship and recognition in old school medical bodies.

This attitude of the old school of medicine, revealed to us from both the official and individual point of view, assures us that amalgamation with the old school of medicine at the present time would mean for us not affiliation or co-operation in the true sense of these words, but merely absorption so far as our identity is concerned, and suppression or rejection of those principles and tenets for which a scientific and practical homœopathy stands.

Absorption of ourselves and our homœopathic organizations, as well as suppression of the principles and tenets representing a century's life work of these organizations being the controlling factor prompting the old school of medicine in their dealings with us, certainly demonstrates why a continuance of homœopathy is justifiable on account of the attitude of old school medicine toward homœopathy and its practitioners.

I will do old school medicine the justice of believing that

such statements as are contained in this editorial, as well as the uncompromising attitude of old school medicine itself toward homœopathy are honest in that they are prompted by a misconception of what homœopathy is, the cause of its origin and the purpose for which it exists; however, granting this, I believe such misconception to be as reprehensible as it is unwarranted.

Notwithstanding this misconception, homœopathy has made a profound impression upon the world of medicine. Exception cannot be taken to this fact as evidenced by the effect it has had upon the practice of old school medicine; by the fact of the use of many of our remedies, improperly prescribed though they are, by many old school practitioners, though always without acknowledgment as to their source or the principle of drug action; and by their willingness and, in some quarters, their eagerness to treat with us. But exception can well be taken to the material side of their yielding to this impression at the instance of our own success, their own expediency, and almost at the demand of the public. Had this impression been born of a willingness to look into, to accept and to acknowledge the intrinsic value of that for which homœopathy stands, this reprehensible and unwarranted misconception would not now be prompting its attitude of refusing fellowship and recognition in old school medical bodies to homœopathic practitioners.

History bears out this statement, for it reveals that Hahnemann sought to obtain a hearing for his discoveries through the most legitimate and ethical channels, as evidenced by his contributions to *Hufeland's Journal* during the twelve years succeeding 1796, the date of the appearance in this journal of his first contribution, entitled "Essay on a New Principle for Ascertaining the Curative Power of Drugs."

Had his colleagues extended to him and his investigations the same deserved recognition and consideration which the renowned Hufeland extended during this period, there would not have been written into the history of medicine the unreasonable opposition to, and rejection of, the investigations of Hahnemann the physician nor the unjustifiable acrimony and persecution of Hahnemann the man.

So great was this opposition and persecution that Hahnemann, though a man of exceptionable scholarship, of pre-eminent learning in the physical sciences as attested by his stand-

ing as an authority in chemistry, and a physician whose attainments in the field of general medicine were of the highest order, was unable to obtain from his profession that honest and honorable consideration of his investigations and teachings to which they were entitled and to which his colleagues were as honestly and honorably invited.

As a result of this closure of official contemporary medicine to the truths which he offered there occurred the inevitable thing to occur under the circumstances, namely, that segregation of medical men to whom his truths *did* appeal, and which was necessary to their development and promulgation inasmuch as these truths would not be received, not even for examination, by the official medicine of the times.

This segregation, thus forced into existence by the same intolerant medicine which ever after has so strongly objected to the existence of the creature of its own creating, and increased, strengthened and more firmly united by a continuance of the same intolerant attitude through the century, resulted in the birth of homœopathy and its development into the scientific, practical and eminently successful method of therapeutics making up the bone and sinew of our distinctive school of medicine of the present time. So much for the cause of our having been given birth, and under circumstances over which we had about as much control as we have over our other prenatal bearings.

Intolerant medicine having caused the birth of homœopathy by thus forcing into existence this segregation of physicians accepting the truths offered by Hahnemann, and a continuance of this intolerant attitude during the century having necessitated a distinctive school of medicine as the only means by which homœopathy could maintain its existence, it is still intolerant medicine, as manifested by their official withholding of fellowship and recognition from us so long as we remain homœopathic practitioners, which makes a continuance of homœopathy as a distinctive school of medicine as necessary as it is justifiable.

In thus frankly sounding the attitude of old school medicine toward homœopathy and homœopathic practitioners, and thereby demonstrating not only the justification, but the necessity, of a longer continuance as a distinctive school of medicine, I desire to repeat my opening sentiment that it is furthest from my desire or purpose to deal with this ques-

tion in any narrow or prejudiced partisan spirit. Rather is it a fair and honest attempt to allow past and present history to speak for itself, for the purpose of guiding us aright to a proper performance of our trust as guardians of the principles and practice of homœopathy, and of the rights thereof.

In our continuance as a distinctive school of medicine let us be as frank and honest with ourselves, in our own attitude toward homœopathy, as we are in our criticism of the attitude of old school medicine toward ourselves.

Let our attitude toward homœopathy be such as that we shall impress the world of medicine that we neither accept the teachings of Hahnemann nor follow out its practice as blind partisans of Hahnemann, believing and doing merely because he believed and did thus and so; but as liberal and progressive physicians who are giving our special attention to the study and practice of homœopathy, because its therapeutic principle and the essential tenets pertaining thereto are being constantly attested as valid by the scientific discoveries and developments in the various fields contributory to medicine, and because the therapeutic application of this principle of drug action in accordance with these tenets is constantly affording us demonstrable and irrefutable clinical results.

We can best render unto Hahnemann the things that are Hahnemann's, in our acknowledgment and gratitude to him as the promulgator of these principles which stand thus attested, by our testifying to the superiority of the genius of the man and physician over the transcendentalism and ignorance of the times in which he lived; and to this superiority we most certainly do testify when we accept these principles which are an outcome of his genius, and reject certain explanatory theories which are the outcome of the transcendental and ignorant philosophy of his day, but which crept in alongside these principles.

When the world of medicine is thus impressed with our unanimous attitude toward our own school of medicine it will acknowledge that we are in possession of a homœopathy, as scientific and sound in its philosophy as it is practicable and efficient in its therapeutic application.

Then will the older school of medicine extend to us that true affiliation, carrying with it full fellowship and recognition to us as homœopathic physicians. But until such a medical

day dawns on the horizon of old school medicine we must insist upon "The Continuance of Homœopathy as a Distinctive School of Medicine."

**THE SALT RIVER VALLEY CLIMATE (ARIZONA), AND ITS EFFECTS UPON
NOSE, THROAT AND LUNG DISEASE. (ALTITUDE,
1,000-1,300 FEET.)**

BY BERNARD E. BIGLER, M. D., COLORADO SPRINGS, COLORADO.

EVERY physician, if he wishes, may visit different climates and give his views upon their good and bad effects on certain diseases, but, unfortunately, few avail themselves of the opportunities to study climatology, while away on their yearly vacation. On the other hand, to a certain number is given the undesired privilege of seeking the efficacious results of a certain climate, and often of many, and to this group should fall the lot of giving an opinion concerning their respective merits.

No one can give a correct statement concerning any climate, unless he has been closely associated with the invalids of that particular region, and has also been a resident of that part of the country at least six months or a year. Better still is it if he is an invalid himself. It is astonishing and pitiable, how many of our supposedly well-read physicians, are sadly lacking in this knowledge of climates. Often, a physician will send a poor, weak consumptive, in the last stages of the disease, to the same climate to which he has previously sent one, who only showed its incipency, not recognizing the fact that they needed two totally different treatments.

My views may be rather strong, but I saw so many, hundreds, I might say, to whom the climate was entirely unsuitable, and others in such an advanced stage of the disease that many had to be carried on stretchers from the train, their physicians having put off and put off sending them away, hoping in all faith to abort or arrest the dread disease, and who were, alas! in a little while shipped to their homes again in pine boxes!

The Salt River Valley of Arizona, of which Phoenix is the metropolis, has, in the last few years, become a veritable Mecca for thousands of consumptives, and some nose and throat cases, the greater number of whom have come by the advice

of physician, family or friends. They have been merely told to "Go West," or "Go to Arizona," the advisors actually knowing little or nothing of the suitability of the climate to which they are sending these poor, hopeful invalids. Having spent six months in this region, I wish to help others, indirectly, through their physicians, if possible, in seeking the proper climate.

I will first quote Weather Bureau statistics for the year 1901-1902, to give some idea of the exact weather conditions for that year in Phoenix, and this can be taken as a standard for the whole surrounding valley.

	Temperature				Humidity Relative		Rain in inches	Clear Part Cloudy		
	8 A. M.	8 P. M.	Max.	Min.	8 A. M.	8 P. M.		Cloudy		
January ...	42.9	61.9	75	24	60	34	.43	15	6	10
February ..	46.3	64.8	85	34	77	42	1.46	11	7	10
March	47.9	71.1	87	35	52	24	.33	21	5	5
April	51.4	78.5	92	39	42	15	T.	18	9	3
May	60.9	86.8	98	50	41	19	.10	18	11	2
June	67.6	96.9	112	59	27	10	.00	26	4	0
July	80.0	103.9	112	72	47	20	.35	17	14	0
August	78.7	103.2	110	70	60	26	1.73	19	10	2
September .	68.2	95.2	105	53	40	17	T.	28	2	0
October ...	59.8	83.0	100	41	52	25	.46	22	5	4
November .	57.3	71.7	86	44	66	33	.01	17	7	6
December ..	39.5	61.7	80	24	44	20	.00	21	8	2
Year	57.9	81.3	112	24	51	24	4.87	233	88	44

Snow, 0.

Fog, 2—Unusual.

Max. Temp. above 90°=159 days.

Highest Temp. June, 1883=119°.

T.=trace.

One can readily see by glancing over this condensed weather report, why so many invalids are sent to this climate, with a relative humidity for the year, of only 51 and 24 respectively for 8 A. M. and 8 P. M., and 233 clear days out of the 365. The climate, too, is very moderate in winter, 24° being the lowest recorded for this year. But one cannot say the same of the summers, for if it were not for the great dryness, the heat would be unbearable.

I will not take up the effects of this climate upon nose and throat separately, but as one, for what affects the one, will affect the other, but I will say emphatically, I would never send a nose or throat case to this climate, to derive benefit.

By careful inquiry, and from my own experience, I found,

in those suffering from rhinitis or pharyngitis or laryngitis, a decided aggravation of their disease, and moreover, those free from such affections, were very prone to acquire one or all, especially rhinitis. The great quantities of dust and sand accompanying the frequent wind storms, and the extreme dryness, irritate a healthy mucous membrane, and in those already diseased, tend to aggravate all the conditions present in nose or throat, no matter whether atrophic or hypertrophic, tubercular or non-tubercular.

The mucous membrane is called upon to give out moisture much more rapidly than in a less dry climate, the normal discharges, whose duty it is to lubricate and cleanse, thicken, forming crusts throughout the nasal passages thus giving rise often to complete closure of the openings, making a hot-bed for germs to take their hold. The dust, of course, keeps the passages in a state of constant irritation.

As to the good and bad effects of this climate on pulmonary disease (Tuberculosis), the cases I found deriving the most benefit, and those who had been practically cured, had been in an advanced stage of the disease. The mildness of the climate enables one to be in the open air all winter, 24 hours out of the 24, in a tent or screened porch at night, and in the sun, on a reclining chair during the day. But now we come to the point I want to emphasize especially. Those cases in the advanced stages, and weakened by the ravages of the disease, can, with a great degree of comfort be out of doors constantly, the climate being so moderate and warm that the tendency to severe chills is greatly diminished, and often speedily vanishes. Even in the summer months these patients can sit outdoors in the shade and be quite comfortable. Of course, these cases comprise those who can take little or no exercise. On the other hand, I found many in the first stage of the disease, deriving but little or no benefit. Most tubercular patients, before contracting the disease, have led energetic, active lives, either mentally or physically; when, therefore, you put such an one, who scarcely feels sick, and who is ambitious and active by nature, in a climate, that to my mind is enervating in the extreme, and advise rest, you cannot expect him to derive the benefit he could obtain in a higher altitude and more bracing air, where he could derive equal benefit with less exercise and yet not suffer from the debilitating and enervating action of the heat.

In summarizing I wish to say that cases that markedly show and feel the effects of the disease and need absolute rest, or nearly so, are the ones that seem to derive the most benefit from this climate. On the other hand, for cases running a very moderate temperature of 99-99⁴ with no severe symptoms, a higher altitude and more bracing air is much more beneficial than the climate of the Salt River Valley.

I can verify my statements in every respect, having been brought in close contact with patients suffering in all stages of the disease.

In the last week of November of the fall of 1903, the thermometer registered 90° or above for quite a time, and in February of this past winter it ranged from 90-95° in the shade at 2 P. M. for over a week. It is rarely below 75° any time during the winter at mid-day. There is a marked drop in the temperature at sundown, the nights being always pleasant, winter and summer.

PROPER LIMITATION OF MARRIAGE.

BY MAURICE C. ASHLEY, M. D.

(Superintendent, Middletown State Homœopathic Hospital, 1904.)

(Read Before the University Society, Middletown, N. Y., May, 1904.)

THE object of this paper is to set forth some of the existing needs for the limitation of marriage in the unfit—in those who are physically and mentally incapable of begetting sound offspring. Just how far one can go in prohibiting marriage and procreation, where such prohibition is desirable, is a serious problem. At the outset, one is met with numerous and discouraging complications, and is forced to acknowledge that unless judiciously cautious those who set themselves the task of bringing about reform along these lines are liable to adopt prohibitory measures that will perhaps work out injustice rather than justice.

The time has not yet arrived when it is possible to determine positively whether a given individual will become insane or not, or whether it is possible for him to become the parent of sound offspring.

I shall in this paper confine myself merely to acting as a guide board. I shall attempt to do little more than to point out

a few of the significant dangers to be met along the social road, with perhaps a hint now and then as to what appears to be the most promising way whereby society may obtain relief from existing dangers, and secure the prevention of new dangers.

There are, perhaps, some who will question whether there is such great need of reform, and of modification of the marriage laws. In anticipation of such questions, let me cite some facts which I believe will convince the most skeptical,—facts which must appeal to us not only as taxpayers, but also as men,—men interested in society as a whole, and in the individuals who make up society; men who are fathers of families, the members of which are in constant danger of vitiation from intermarriage with degenerate individuals, so long as these degenerates are permitted the freedom in marriage at present allowed.

There are in the custody of institutions in this Commonwealth 25,000 insane, 12,301 in penal institutions and reformatories, 38,171 in homes and schools for women, children blind, epileptics, and deaf, and 89,432 in almshouses,—a grand total of 164,904. This number does not include untold thousands of persons suffering from consumption, and thousands of others suffering from various diseases which render them unfit for the reproduction of their kind.

We have, then, in custody in this State 164,904 helpless or dangerous human beings who are also to a great extent dependent, and must be supported and cared for by the charity of their fellow men. Exclusive of the consumptives, and including some of the vast numbers of the poor, cripples, and the aged, there must be cared for one helpless person to every 40 of the population of this State.

“In one State, (Indiana) there were last year 404 feeble-minded women in the asylums for the poor; 170 of these were between 16 and 45 years of age. One of these women had borne 12, another 11, another 8 children. Five had had 19 children, and of these 19 the histories of 15 had been looked up. These 15 had been maintained at public expense a total of over 104 years. Assuming that it had cost as little as \$100 a year, they have cost the State already over \$10,000, and 10 of them are still on public support, which last year cost \$1,163.10. This is one small item in one State.”

These are not mere words and figures; they are serious facts. As such, they appeal to the very depths of one's man-

hood, intelligence, and charity, for relief. These unfortunate creatures confront us on every side; we meet them wherever we turn, and we ask, "Whence came this multitude of deficient and diseased creatures?" "From the indifference, the thoughtlessness, and the injudicious tolerance of our stronger brothers," thousands seem to say. "We were born by your approval, of parents who were epileptics, insane, imbeciles, alcoholics, and otherwise diseased. Our parents were unfit, yet gave us being. By them the seeds of disease and crime were planted in our being,—the seeds which poison and stupefy, yet do not kill. We came into the world defective and deficient, yet in the struggle for existence our weaknesses were forgotten, we were pushed and jostled about by our stronger fellows, till our frail minds and bodies gave way, and we became helpless burdens upon your charities."

Such children are daily born by hundreds, with the same problems of existence confronting them, the same hopes, and often the same social and other ambitions that we cherish. It usually requires but a few years for the law of the survival of the fittest to become exemplified, and the weak ones to go to the wall.

The fact (and one which is undisputed) that insanity is increasing must of necessity attract the attention of those who are interested in the stability of society and of our government. The increase is indeed alarming. There is one insane person in this State to every 270 of its population.

Children to-day, regardless of their physical and mental stability, are sent to schools where each is assigned an equal task, where all are stimulated to exert their full energies.

A given standard, as a rule, is set for all. The incapable ones feel themselves in disgrace, the stronger ones only are able to stem the tide; others, because of inherent weaknesses and defects, are caught in the eddy of disease, henceforth to be the most piteous of creatures, the driftwood of humanity. There are others who are compelled to toil in shops and factories with uncongenial and vicious fellow laborers, in vitiated atmosphere for many hours daily, only to return at night to illy ventilated homes or to otherwise improper surroundings. These conditions prevail until the defective system yields to the unnatural life and strain. Many such endeavor to exist on poorly prepared and unsuitable food. Their systems, as a result, are poorly nourished and inadequately prepared to

meet the strain put upon them; hence physical or mental disease, or both, are easily acquired and with difficulty thrown off. Thousands of others, because of the poverty and indifference of parents, are never sent to school at all, but are allowed to grow up in idleness and ignorance, and to mingle with criminals and like classes; yet when they attain the age of manhood and womanhood, they appear to find no difficulty in finding mates, and in begetting numerous offspring that start out heavily handicapped in the struggle for existence.

It is a deplorable fact that such beings, as a rule, marry very early, often while under age and undeveloped, and immediately proceed to beget children, who must, it would seem of necessity, be burdened with the degeneracy of the parents in an intensified form.

Whether there is necessarily some inherent or constitutional defect in every individual who becomes insane is, I believe, a debatable question. Many authorities claim that a predisposition to a mental disease need not be present in every individual that becomes insane. There are others who believe that there can be no insanity unless the individual is already predisposed to the disease. There is a certain specific disease which is claimed to be the cause of insanity in a large number of cases, yet there are many who are afflicted with this disease who do not become insane. Many conditions exist which are said to be causes of insanity; for instance, mental shock, grief, excessive and sudden joy, physical disease, privation, etc. Yet all those who witness distressing accidents do not become insane. Why, then, we may inquire, should some become insane under this condition unless there is some defect in the organization of the individual?

The part played in producing degenerates by the use and abuse of drugs, alcohol, and nicotine, is too well known to require special mention at this time.

The marriage laws of this Commonwealth permit, or at least do not prevent the union of epileptics, inebriates, criminals, mutes, and those suffering from tuberculosis and various other constitutional diseases. Likewise, no restriction is put upon persons afflicted with hereditary taints, or predisposition to serious physical or mental diseases which they may transmit to their offspring, or which may be of such a character as eventually to incapacitate the individual, and to render him unable to support his family or himself. Thus both parents and chil-

dren become objects of charity and burdens on the State. Fortunately, however, the law of the survival of the fittest often operates to the advantage of society at large. Large numbers of those who would eventually become insane, or otherwise non-supporting, succumb before they reach this condition of deficiency above described, or before they are old enough to reproduce their kind. I do not wish to convey impression that I believe the offspring of every defective or degenerate parent will become insane, a criminal, or a burden to society. I do, however, believe that we have sufficient evidence to prove that a dangerously large number of the children of degenerate parents inherit a strong predisposition to mental and physical deterioration.

Permit me to cite a few facts which I believe will substantiate this claim. During the past few months I have been called upon to examine the mental condition of two noted criminals. No. 1, a man about 30 years of age, the son of an inebriate father, showed early in his childhood criminal tendencies. He was frequently arrested and placed in schools for delinquents, in reformatories, and finally in State prison, where he was executed for committing a most brutal murder. No. 2, was a man 39 years of age, also the child of an intemperate father, and the brother of an epileptic. He has spent 20 of his 39 years of existence in jails, asylums, and prisons. Soon after his release from prison he committed a most heinous murder, for which he was electrocuted.

It is a matter of frequent observation—the intellectual deficiency or instability of children conceived when one or the other parent is in an intoxicated state, and, of course, it is in that state, when judgment and self-control are at their lowest ebb, that parents are most careless about this grave question of procreation, even though they realize the undesirability of offspring in their sober moments. The sexual appetite is one of the primitive instincts, next in strength and potency to the instinct of self-preservation. The deplorable fertility noted in the very persons who should not produce their kind (in idiots, imbeciles, and other degenerates) is due not so much to the over-development of the sexual instinct as it is to the lack of inhibitory power,—the lack of self-control that stronger minded and better endowed persons possess.

In our State hospitals we have as patients, fathers and sons, mothers and daughters, sisters and brothers, uncles and

nephews, aunts and nieces, and various other hereditary groupings that show how potent is the law of direct, as well as of collateral inheritance. We have had twin sisters and a brother brought to the Middletown State Homœopathic Hospital within a short time by degenerate parents who never should have been allowed to marry. Some other law than the survival of the fittest was evidently at work here. Many of our patients have received the endowment of insanity from the paternal and maternal branches. A given case that just comes to mind has a maternal grandfather insane; a paternal grandfather two uncles and a brother committed suicide, two cousins and a sister have attempted it, and the patient herself has threatened it. Such cases remind one of a remark made by another patient with a similar inheritance, "I am fairly saturated with insanity," she said, in discussing the causes which led to her own psychosis.

That the marriage laws are lax is evident. The criminal case No. 2, just mentioned, was married soon after his release from prison, and but a short time prior to the time he committed murder; fortunately he was so thoroughly inoculated with syphilis that he was unable to beget children who could survive. Not so all these defective beings. Some are endowed with robust physical organizations, with their primitive instincts in full sway, and their propensity for marriage and reproduction deplorably strong. One such case, a young girl who had herself one attack of mania, whose father had been insane for years, whose mother had an attack of melancholia before she died, and whose paternal aunt is said to have been very eccentric, left the institution on her recovery only to marry shortly after a man addicted to the excessive use of alcohol. Those persons, neither of whom should have been permitted to marry, have become the parents of five children in the same number of years. The mother has had several attacks of insanity since her marriage, but the child-bearing still goes on.

What inhibition can one expect from such parents, one is forced to ask; and one almost as hopelessly asks, What can we expect from prohibition either? Nature finds a way to assert herself even at the expense of the individual and the whole social order. Yet that prohibition of some sort should be provided as a safeguard, none can deny. We are frequently shocked by the announcement of the marriage of condemned

criminals. The permitting of such acts are grave reflections on our social code.

As before stated, it is not claimed that all the children of parents, one or both of whom have been insane, or are deficient physically or mentally, will become insane, epileptic, imbecile, criminal, or otherwise markedly deficient; but it is claimed that a sufficiently large number are deficient to warrant us in considering whether or not our marriage laws are not in need of revision, so that provisions may be made whereby we can prevent the marriage of the unfit. I believe this revision to be an urgent necessity. I am convinced, however, that no matter what legal restrictions and safeguards may be provided, Cupid will find a way in far too many instances, and that we shall never be able to control this matter by legal restrictions alone. I am hopeful that much might be accomplished by the united and earnest efforts of teachers in schools and colleges, by clergymen in their pulpits and in their association with their parishioners, by physicians in their practice, and by parents in their homes. All these guardians of the young should endeavor by persistent training to instill into the minds of developing youth and maidens the dangers of marriage between persons physically and mentally tainted with serious diseases. These ideas should be inculcated early, before the affections have had a chance to become centered upon persons unfit for procreation.

It is during the adolescent period when ideals are beginning to develop, that each youth should be taught the value of self-discipline and self-control. Hence it is during this period that he should be taught that he is wronging himself, his contemplated mate, his helpless offspring, and the whole social order, if he permits himself to become a father, unless he is physically and mentally fitted to endow his offspring with a sound organization. The disappointment and suffering incident upon the necessary self-denial felt by many would be keen, no doubt, and the self-denial would require noble renunciation, but I believe that much good may be accomplished along these lines.

It is a trite but true observation that if as much attention were given to the breeding of human beings as the farmer gives to that of his stock, the benefit to society would be enormous.

It would appear that we should regard marriage much the same as any other contract,—if evidence be adduced to show

that fraud, intentionally or otherwise, has been practiced, and that either of the contracting parties were unfit, the marriage should be annulled forthwith. The fact that either is incapable of procreating healthy children should be sufficient cause for annulment. Certainly, the sooner the marriage ties under such circumstances are severed, the better. Possibly a requirement that both contracting parties shall submit a certificate of freedom from any marked or dangerous taint before they can be married, would be of benefit, and would check to some extent the reckless marrying of the unfit.

"Assemblyman T. F. Matthews will shortly introduce a bill providing that all persons must obtain a physician's certificate before a marriage license can be issued to them. 'The bill,' said Mr. Matthews, 'is designed to make greater restrictions against the marriage of imbecile and half-witted persons, and also to prevent those having consumption and other diseases from marrying.'"—*New York Times*, March 14, 1904.

Two measures for the prevention of the production of degenerates have been considered very favorably because of their seeming simplicity. The first is the regulation of marriage, but this means has been and is greatly overestimated. In the first place, the law has only attempted to prevent the union of those suffering from the graver forms of degeneracy, and has not attempted to prohibit those merely tainted by heredity, or simply neurotic. If the degenerate is not permitted to marry, he will probably indulge in illicit intercourse of a permanent character, which is equally as productive of degenerates as legitimate unions.

The writer now has under his care a woman who has for some years lived and cohabited with her brother. She gave birth to a male child as a result of this intercourse. Years later she cohabited with this son of the incestuous union with her brother. These facts were well known in the neighborhood in which these creatures lived.

Castration as a means of rendering a degenerate unable to reproduce his kind, has been seriously considered by many eminent sociologists and physicians, and the operation has been performed upon criminals and others. The results have been perfectly satisfactory as a preventive measure, but it is claimed that the effects upon the nervous system are undesirable. I believe, however, even if there were no ill effects following the operation that there would be such opposition to

the procedure that such a requirement could not be enacted by any legislative body, nor enforced even if it should become a law. There is another operation which has been performed for the same purpose, and which is as effectual, yet is devoid of many of the objections of castration. It consists of simply severing the vasa deferentia, thus completely destroying their function. It is claimed that the operation does not destroy or diminish the ability or desire to perform the sexual act, but that it is an absolutely positive means of rendering the subject incapable of reproducing his kind.

"Sharp urges that the legislatures be prevailed upon to enact such laws as will restrict marriage, and give those in charge of State institutions the authority to render every male sterile who passes its portals, whether it be almshouse, insane asylum, institute for the feeble-minded, reformatory or prison. He has severed the vasa deferentia in 42 patients, whose ages range from 17 to 25, and he speaks most favorably of the operation. He states positively that it does not impair the sexual power of those operated upon, that they improve mentally and physically, in that they increase in flesh, feel that they are stronger, sleep better, their memory improves, the will becomes stronger, and that while prior to the operation they made no advance in school, their advance is now fairly satisfactory."

It is possible that a few might be persuaded to submit to the operation voluntarily if convinced of its necessity, but in order that the greatest benefit might be attained, the operation should be made compulsory on all men desiring to marry who are sufficiently degenerate to make it reasonably certain that they cannot beget sound offspring. Certainly the operation should be performed upon every confirmed criminal, whether he contemplates marriage or not. I believe also that the fallopian tubes of every woman of the child-bearing age convicted of crime for the second time should be ligated, thus preventing her from conceiving.

The object of this paper will have been attained if its readers are led to think more earnestly on these questions that touch so closely the individual and his neighbor; for to think on these things earnestly is to rouse one's self from indifference, and to set to work, each in his own field and in his own way, to bring about the reforms so obviously needed.

LUMBAR PUNCTURE.**BY SIGMUND RAUE, M. D.**

Chief of the Children's Clinic, Hahnemann Hospital Dispensary, Phila.

(Read before the Wm. B. Van Lennep Clinical Club, February 7th, 1905.)

Lumbar puncture was introduced by Quincke as a method of diagnosis in intracranial affections and its value in this direction is now firmly established. Besides it has also attained to some extent the role of a therapeutic agent. Owing to the continuity of the sub-dural space throughout the entire cerebro-spinal nervous system, it is self-evident that a specimen of fluid withdrawn from the lower end of the dural sac is identical in character with the fluid high up in the spinal canal, and even within the cranium. Clinical experience has proven this to be true so regularly that now we are in a position to learn the nature of an intracranial effusion or accumulation with practical certainty. Furthermore, by means of a canula inserted into the spinal canal we can estimate the intra-cranial pressure as readily and accurately as, for example, we estimate the blood pressure in the peripheral arteries.

Before entering into a discussion of the character of the cerebrospinal fluid under normal and abnormal conditions, I shall first describe the technique of performing lumbar puncture.

It is well to remember that the spinal cord proper terminates in the conus at the second lumbar vertebra, where it divides into two coarse strands of fibres, which hug the lateral walls of the spinal canal. These bundles constitute the cauda equina and there is plenty of space between them for the safe introduction of a canula; besides, they are more or less movable and therefore not readily wounded.

If, therefore, we introduce a small trocar between the spines of the third and fourth or fourth and fifth lumbar vertebrae, we enter the dural sac most satisfactory for the purpose of aspiration.

The best instrument to use is the original Quincke needle, which is made by Tiemann & Co., after a pattern brought to this country by Koplik. An aspirating needle—10 cm. long and 1 mm. in diameter—answers in the case of children, but a small trocar will be found more convenient to handle. The operation must be performed under the strictest asepsis;

this applies to the operator's hands, the instruments, and to the skin at the site of puncture. Scrubbing with soap and water, followed by the use of alcohol and lastly a 1-1000 solution of bichloride is to be recommended.

It is by no means easy to locate the different vertebrae by attempting to count them from above downward, but if we re-

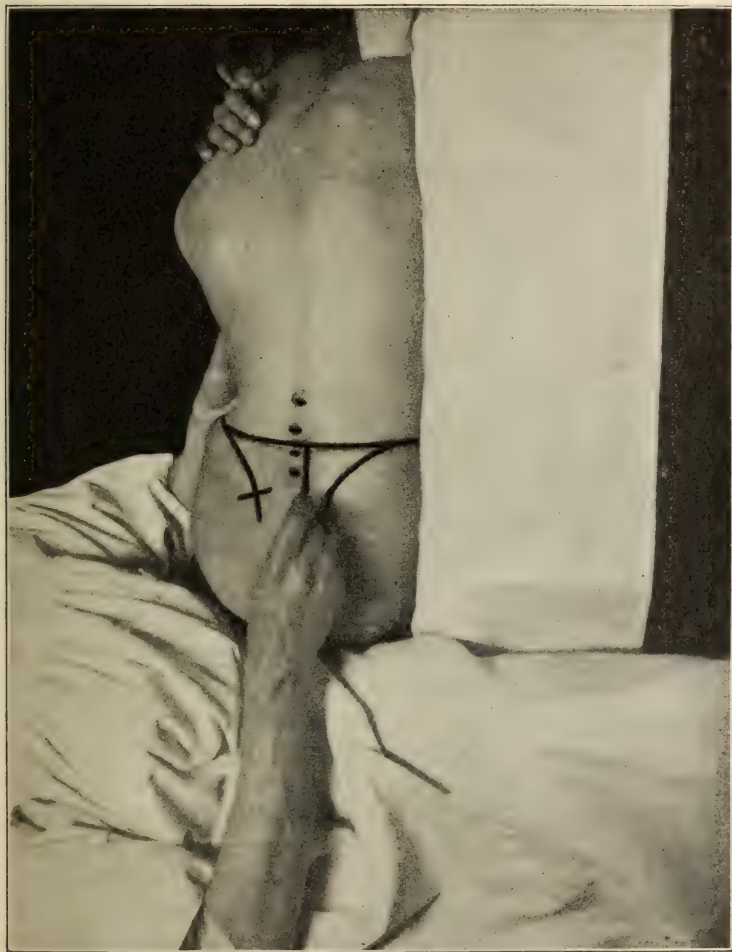


FIG. I. METHOD OF PERFORMING LUMBAR PUNCTURE.

member that a line drawn across the back on a level with the crests of the ilia will intersect the fourth lumbar interspace, it is a simple matter to select either this space or the one above it as the site for puncture. We may puncture as high as the

second interspace, but there is not only an imaginary but an actual advantage in selecting the lowest point, for as Sahli was able to demonstrate, pus and other elements tend to gravitate to the lowest point, and when present in inconsiderable amount, clear fluid may be withdrawn from the second, while a cloudy one may come from the fourth interspace.

The patient is laid upon the right side, and the spinal column bowed as much as possible by flexing the legs upon the abdomen and pressing down upon the buttox, at the same time bending the upper portion of the back by downward pressure upon the shoulders. Care should be exercised not to exert pressure upon the neck, but always upon the shoulders. The spines of the vertebrae now stand out prominently and we are in a position to plunge between them into the canal. When the patient is comatose, no anesthetic is required, and when partly conscious, ethyl chlorid should be used locally. In young children the laminae of the vertebrae are horizontally placed and the interspinous ligament is not very firm. For this reason we can pierce directly between the spines and enter at a right angle to the spinal column. In older children the laminae are somewhat overlapping and the interspinous ligament is tough and firm. Here it is best to pursue the course first recommended by Quincke, namely, place the point of the needle to the lower side of the median line and a little below the interspace; then pierce upward and inward, thus avoiding the ligament and at the same time slipping in between the laminae. In a child two years old, the dural sac is penetrated when the needle is inserted at a distance of 2 cm., in adults it must penetrate four to six cm. With a little practice we soon learn to recognize when the needle is in the spinal canal; there is no further resistance and the point can be freely moved. The stilet of the trocar is now removed and the first few drops of fluid are allowed to flow out; the remainder is caught in a sterilized graduate, in order to estimate the quantity withdrawn. Ten c.c. is sufficient for diagnostic purposes, but when the pressure is great we may withdraw as much as fifty c.c. A portion of this can be utilized for making cultures or for inoculating guinea pigs. The balance is studied macroscopically and microscopically. The chemical examination is also important.

The study of intracranial pressure is interesting, but of little clinical value in pediatric practice. For practical purposes

we can estimate this sufficiently by the force with which the fluid flows from the canula. If a manometer be attached to the canula the pressure can be measured in mm. of mercury. The normal pressure in adults in the prone position is 5 to 7.3 mm. Hg.; a pressure above 15 mm. Hg. is indicative of conditions such as meningitis and brain tumor (Sahli). Koplik gives the pressure as from 5 to 35 mm. of mercury. It is lower in children than in adults.

Under normal states of pressure the fluid comes from the canula drop by drop. When the pressure is increased the drops come more rapidly and with considerable effusion it will spurt out in a stream. The stream is not steady and is affected by respiration. It is interesting to note the immediate amelioration of symptoms when such pressure is relieved, but unfortunately this improvement is but temporary in the majority of instances. In young infants the fontanel offers an additional means of estimating intracranial tension.

The normal cerebrospinal fluid is clear, colorless and limpid. Its specific gravity is very little above that of water, from 1003 to 1005. Besides a low percentage of albumen (less than $\frac{1}{4}$ per cent.; Lenhartz), it contains a trace of sugar and salts. Alfred Hand (*Phila. Med. Journal*, Aug., 1902,) found from 0.5 to 1.9 per cent. albumen by bulk with the potassium ferrocyanid test, while in ordinary meningitis there will be from 4 to 5 per cent. and in tuberculous meningitis it ran as high as 16 per cent. in one of his cases.

Absence of sugar speaks for ordinary meningitis, while its presence favors a tuberculous condition. (Hand.)

The admixture of blood may be due to the wounding of a vein and rather spoils the specimen for gross and microscopic study. It may, however, throw light upon the diagnosis when hemorrhage into the cord or ventricles is suspected.

In tuberculous meningitis the fluid is usually but a trifle cloudy, in fact it may require close inspection in a good light before we will recognize a slight turbidity. Such fluid should be placed in a conical sediment glass in a refrigerator for 24 hours, at the end of which time a delicate mesh work of spontaneously coagulated fibrin will have formed. Toward the latter part of the disease the fluid becomes more cloudy.

In epidemic cerebrospinal meningitis the fluid may be clear in the early stage, but later it becomes purulent. The same may be said of the other forms of meningitis, usually second-

ary—in the early stages of which there may be clear fluid with suspended flakes of fibrin, just as we see within the cranium—later becoming creamy or admixed with blood.

In hydrocephalus the fluid is clear, although it contains some leucocytes.

The cellular elements of the cerebrospinal fluid are of definite significance. As in any other pyogenic infection, the exudate consists chiefly of polynuclear leucocytes in suppurative meningitis. This also holds good in meningitis due to the *pneumococcus*, and the epidemic variety due to the *meningococcus intracellularis* of Weichselbaum.

French writers lay great stress upon the predominance of lymphocytes in tuberculous meningitis. While the value of cytodagnosis in cerebral inflammations is not without limitations, still a marked increase in lymphocytes over polynuclear elements is strong presumptive evidence in favor of a tuberculous infection. Osler states that in his recent cases he was not able to verify these claims and it is quite true that the lymphocyte count is subject to a wide range of variations. Thus, Hand found in a case of tuberculous meningitis that one tapping gave 35 per cent., while a subsequent one gave 85 per cent. lymphocytes. A persistent excess of polynuclears seems to rule out a tuberculous infection with more or less certainty. Again, the number of tubercle bacilli present seem to bear a direct ratio to the number of lymphocytes that will be found in the specimen.

In purulent exudates ordinary cover glass preparations stained with methylene blue are sufficient for the study of the bacteria present. Streptococci and pneumococci are recognized by their morphology while the micrococcus of epidemic cerebrospinal fever is a diplococcus similar in appearance to the gonococcus. The majority of these diplococci will be found within the pus cells. As Park puts it, the cells are crowded with the diplococci. The differentiation between meningitis due to this diplococcus and that due to pneumococci or streptococci is of great clinical value, as forty per cent. of the former cases get well, while almost all of the others die.

Tubercle bacilli are as a rule present in scant numbers, but if we allow the fluid to stand for twenty-four hours, the bacilli and cellular elements will become entangled in the meshwork of fibrin, which has formed at the end of that time. The fluid can then be centrifuged and the sediment stained for

tubercle bacilli in the usual manner. By this method their demonstration becomes successful in the majority of cases.

The indications for the lumbar puncture are any obscure cerebral condition in which there is clinical evidence of inflammation of the meninges or the presence of an exudate, whether it may be serous, purulent or hemorrhagic.

So far its chief value has been that of a diagnostic aid, the importance of which cannot be questioned. Temporary relief of symptom, coma, convulsions, has also attended its use, and in the control of uraemic convulsions and coma it has proven of value. Complications, such as pneumonia, contraindicate it. When carried out *lege artis*, and for a definite purpose, lumbar puncture is not only justifiable, but absolutely essential to the scientific practitioner.

THE TUBERCULOSIS SITUATION.

BY EGBERT GUERNSEY RANKIN, A. M., M. D.

Professor of Practice New York Homœopathic Medical College, Physician to the Metropolitan Hospital and Tuberculosis Infirmary, Department of Public Charities, and to the Flower Hospital, New York.

(Read before the Homœopathic Medical Society of the State of New York, September 28th, 1904.)

The frequency with which the subject of tuberculosis has been presented to the medical profession during the past few years would seem to have left little that could be said without repeating familiar themes. To dwell upon the virtues of open air treatment and abundance of nutrition is now almost as superfluous as to speak of the desirability of asepsis in surgery. To discuss medication is to raise questions of difference of opinion. There is, however, one aspect of the subject, which, notwithstanding the general acceptance of its importance, is so much regarded from a theoretical standpoint and is yet so limited in its application that it needs to be repeated again and again until theory becomes practice—this is *prevention*.

Since the revival of the theory of the infectiousness of tuberculosis and the general acceptance of this feature as an absolute fact, great advances, it is true, have been made on the lines of prevention, but they are only beginnings. Progress has been slow, and the profession and public too apathetic. In consequence, existing means for putting into actual practice factors for caring for and limiting tuberculosis are utterly in-

adequate. We are, in fact, in many instances, living in open defiance of our knowledge.

It would, perhaps, be interesting to recall in this connection that the infectious nature of the disease was long ago recognized, or at least suspected. Aristotle attributed its propagation to vitiation of the air by infected persons. Alexander Aphrodionis, who lived in the second century, regarded the breath of "phthysical patients" as poisonous. These ideas were accepted by the Arabian physicians. Fracaster, of Verona, who lived from 1483 to 1553, said that infection was conveyed by fine particles,* thus crudely defining modern bacteriology. In Nantes, in 1750, the clothing of those suffering from the disease, was burned in the market place. In 1754, the Seignior of Florence, took stringent measures to prevent contagion and furnishes the first example of legislation against pulmonary tuberculosis. Laws were also formulated in Bologna, Venice and in certain cities in Spain. Those of Ferdinand IV, who lived in the thirteenth century, were very strict. But the possible infectious nature of the disease does not appear to have been widely accepted, and gradually it was lost sight of, and in 1837 we read that the faculty of Naples, when interrogated as to the infectious nature of tuberculosis, replied in the negative. Then there appears to have been an attempt to cast the glamour of romance over the disease and interesting heroines, with the dire malady, were represented in fiction and behind the footlights as gracefully fading away. How different from the awful and repellant reality we all know.

Then came Koch and Villemin, and the atmosphere cleared. The progress in regard to the care of tuberculosis which has been made during the past few years, is most creditable, but compared to what the conditions call for, as stated, is only a beginning. Boards of Health officially recognize the infectious nature of the disease, and that of New York is probably doing all that can be done under the existing laws. What then is the situation? On one side a positive knowledge of the infectiousness of tuberculosis, its widespread prevalence and great mortality. On the other, what has been done and what remains to be done to combat these sinister influences?

The Board of Health of New York City, after receiving a report of a case of tuberculosis, if the patient is under private

*De phthisi Contagiosi, chap. ix, p. 168. Operum, Hreronvmi Frascatori Veroniensi. Geneva, 1621.

medical care, takes no action; if not under medical care, cases are regularly visited by medical inspectors and trained nurses, the patient and his family instructed as to the necessary sanitary rules to be followed. A special dispensary has also been opened. This care and supervision, however, is all voluntary, accepted or rejected, according to the will of the patient, who comes and goes as he pleases.

If intelligent and well placed in life, the chances of infecting others are in most instances at a minimum, but if the patient is poor or ignorant, or both, which is the case in a large proportion of instances, he goes about at will indifferently, spreading germs of infection until loss of strength compels him to seek the shelter of some hospital.

There is accommodation in the city of New York, including the five boroughs, for about eleven hundred tuberculosis patients, and recently an institution has been opened, outside the city, for about one hundred and twenty more. This will be enlarged later. It is estimated that there are about twenty-five thousand persons in the city suffering from the disease. The actual number of cases reported in 1903 was 6,086 for the boroughs of Manhattan and Bronx, with a population of 2,186,017.

These figures and the fact that hundreds of persons with the disease are at large in the city without any supervision, speak for themselves. From 175 to over 200 patients are admitted in the Tuberculosis Infirmary on Blackwell's Island every month. These come and go at will. Efforts are made to keep track of them, but many are lost sight of for a longer or shorter interval. A patient, for example, leaves the Infirmary improved, insisting upon going out, yet his sputum contains tubercle bacilli. He goes to work, after awhile loses his strength and again seeks admission. In the interval, what about the spread of infection? This happens over and over again. It is true, all are instructed, upon leaving the institution, with reference to infection, but considering the class from which the majority come, these admonitions are no doubt ignored, or imperfectly carried out.

These conditions certainly demonstrate that two essential factors are lacking in the care of individuals infected with tuberculosis, namely, a greater number of institutions and a closer supervision of all those suffering from the disease. The importance of institutional treatment cannot be too highly ex-

toll and its beneficial effects can find no better illustration than in the Tuberculosis Infirmary on Blackwell's Island. Established January 31st, 1902, it has cared for 5,414 patients, of whom 756 were readmissions, and has demonstrated the fact that fresh air, even when not that which is theoretically considered the most suitable for the disease, is attended with pleasing results.

It is interesting also to note that the establishment of this institution has been accompanied by an appreciable decrease in the number of cases of tuberculous diseases in New York City. In 1901, the year before its opening, the number of all cases of tuberculosis in Manhattan and Bronx, population 2,095,668, was 6,049, with a death rate of 2.89. In 1902 the number of cases were 5,744, being 305 less; death rate 2.68, notwithstanding an increase of the population for the year of about 43,000. In 1903 the percentage of deaths was 2.78, showing an increase, but still .11 of one per cent. less than in 1901.

The variety of institutions needed are not expensive sanatoria. The rich and well-to-do are already provided for, but institutions where moderate charges are made, in part self-supporting and others entirely free. The latter are most needed, for as we all know, that disease is more common among the poor.

How can these important changes be best brought about? It seems to the writer that the State authorities should take the matter in hand in a different way from which they are now doing. How often have we heard that if there were as many persons suffering from any one acute disease as there are from tuberculosis, there would be a panic.

The subtle nature of tubercular infection, its slow course in the majority of instances, has induced a feeling of indifference which is shared by a part of the profession. Even at the present time in the Brompton Hospital for Diseases of the Chest, London, heart cases are received with those of pulmonary tuberculosis.

The question of tuberculosis, all will agree, is certainly one of great magnitude. Congresses are held devoted solely to its discussion, yet under the present form of legislation, it is only a little item along with other diseases in the health boards and departments. Is it not too vast and does it not require too much detail and specialization for such a plan of administration?

The insane are confined perforce, partly for their own welfare and partly to protect the community. Why should not the tuberculous be placed under some sort of supervision, and why should there not be a sufficient number of institutions established for his care and for the protection of the community against his infection?

There is a way to meet these conditions and it seems one that would redound to the greatest benefit to the community, this is the establishment of a separate department for the supervision of tuberculosis alone, the regulation of its management and furtherance of the establishment of a greater number of institutions. The founding of such a body would be in itself an important factor in educating the public mind as to the full meaning of tuberculosis and in shaping public opinion as to the importance of preventive measures. Education of the public, we all know, is one of the greatest and most helpful agents for the eradication of the disease.

While comparison has been made to the care of the insane, it is in no way intended to imply that persons infected with tuberculosis should be forcibly confined, as in the instance of the former, but that all should be placed directly or indirectly under supervision, and infection limited by the means which separate State departments or bureaus would eventually evolve or elaborate.

THE CYSTOSCOPE AND ITS USES.

BY RALPH DEMING, M. D.

(Read before the County Medical Society of Philadelphia, January 12th, 1905)

It was twenty-five years ago when Nitze, of Berlin, first demonstrated the cystoscope before a Medical Society in Vienna. For about ten years cystoscopy made but little progress, owing to the size and complication of the instrument and the danger of burning the patient. These failings have gradually been overcome, until the Nitze cystoscope of to-day, for all practical purposes, is probably the most perfect instrument on the market. It consists of an outer and inner tube containing a system of lenses which magnify any object brought in the field of vision. In the vesical end of the instrument is an opening, called the window, and directly under it is a mirror, which reflects the picture into the cystoscope.

Next to the mirror is an optical lens which projects a small inverted image of the picture directly back of it. By means of another lens placed about the centre, the picture is again inverted and projected just short of the ocular end where it is magnified by the ocular lens. The catheterizing cystoscope, in addition to this system of lenses, has a small opening extending its entire length, through which the catheter is passed; the end emerging just back of the window. If the catheter be gradually pushed in, it passes over the window, thus enabling the operator to see it and the ureteric opening at the same time. By means of a screw placed near the ocular end of the cystoscope, the point of the catheter can be guided in any direction.

One of the difficulties in using a Nitze instrument is due to the fact that the picture we see is a reflection in a mirror, therefore, one must always bear in mind that the picture is inverted and what appears to be the nearest point to the operator, is in reality the farthest removed. The lamp in present use is a great improvement over the old one. It is imbedded in asbestos and when surrounded by a fluid medium it is practically impossible to burn the patient.

As an aid in diagnosis, the cystoscope is invaluable, especially from a surgical standpoint. Not only can the bladder be eliminated as the seat of trouble, but the condition of the diseased ureter or kidney can be surmised and the function of the healthy kidney ascertained. Before a nephrectomy it is of vital importance to know the condition of the opposite kidney, and this can best be learned by the cystoscope. The size, shape and outline of the ureteric openings, the character of their excretion, all point to certain conditions, which taken in conjunction with the associated symptoms, enable the surgeon to proceed to operation with a pretty correct idea of the existing conditions. Symptoms when alone relied on are often misleading. Renal pain may be caused by pathological conditions in the bladder, especially when situated near the ureteric openings and interfering with their function. On the other hand renal disease may cause irritability of the bladder and reflex vesical and penile pain, symptoms which point to the bladder as the seat of the disease. Again, for example, in the case of hematuria or pyuria, it is a very simple thing to make a cystoscopic examination to determine the source of the blood or pus, and if it be from the kidneys, a correct diagnosis may often be surmised. Stone in the bladder, if small or encysted, frequently

can be detected only by the cystoscope, and its size, shape and location at once be learned, thus enabling the surgeon to choose the most advantageous operation. The size, shape and location of bladder-tumors can be ascertained, together with the probability of malignancy, while by means of the operating cystoscope it is possible to get a small piece for a microscopical examination. A foreign body in the bladder, if not too large, can be removed, thus avoiding the necessity of a comparatively dangerous operation. I recall such a case that I saw but recently. A woman whose uterus had been removed, per vagina, came to Dr. Jacoby's clinic in Berlin, with a vesicovaginal fistula, associated with a violent cystitis. A cystoscopic examination revealed several small calculi situated on the posterior wall. After an unsuccessful attempt at removal with the lithotrite, the operating cystoscope was resorted to and a small calculus attached to a ligature was removed. This was followed by closure of the fistula and complete recovery. As a general rule women are easier to cystoscope than men, but in some cases in which there is a chronic inflammation of the uterus and adnexa, the shape and size of the bladder may be so changed and the ureteric openings so drawn from their normal position that a successful examination is impossible.

The danger of infection is comparatively small, if the proper precautions be taken; not any more so than in passing a sound. The instrument and penis are of course rendered sterile as far as it is possible, and after the examination the bladder is washed out with a mild solution of nitrate of silver. Glycerine is the best lubricant, as it is transparent and can be boiled. A general anaesthetic is seldom required, but exceptions prove the rule.

The technique of the examination is important, as it is impossible to get a good view of the entire bladder-wall unless some system be followed. Before attempting to cystoscope a case there are three conditions which must be fulfilled: First, the urethra must be of suitable calibre. One that admits a twenty-one French sound with ease is sufficiently large. Second, the bladder must be dilatable to a certain size. There are two methods of distending the bladder, by air or by a fluid. The air method is painful, the instrument used is of comparatively large calibre, and the bladder wall must be kept mopped perfectly dry, an extremely difficult thing to do, thus making it very unsatisfactory in comparison with the other method. The

best fluid medium is a 3 per cent. boracic acid solution, which is non-irritating, perfectly transparent, and if not antiseptic is at least aseptic. In filling the bladder, one should avoid over-distention, as this pushes the ureteric openings back and separates them, making them hard to find. The pressure flattens out the lips of the ureters and renders any pathological condition which might be present obscure. A moderately filled bladder is essential to success, which on an average is one hundred and fifty grammes, although it is possible to cystoscope a bladder which will hold but fifty. Third, the pelvis must be slightly elevated. The height to which the pelvis is raised should be noted, as well as the amount of fluid used, so in case of re-examination all the previous conditions could be duplicated.

After having entered the bladder with the cystoscope, first examine the anterior bladder-wall, as the instrument is now in this position. The color of the normal mucous membrane varies in different parts of the bladder and in different individuals. Its general appearance is a grayish yellow, and it is traversed by a fine net-work of small arteries. Here and there a large branch may be seen. The floor of the bladder and the mucous membrane around the internal sphincter, is a pronounced red. The next step in the examination is to draw the instrument back until half of the window is in the urethra, leaving the other half in the bladder. It is now in position to examine the lateral lobes of the prostate. If normal they are a bright red, and their edges are concaved. If hypertrophied their edges appear as a straight line or are convex. The posterior lobe may be examined by turning the beak down while in this position. Only in exceptional cases should the cystoscope be used to diagnose prostatic conditions, as it reveals nothing that is not already known, and if the gland is markedly hypertrophied or congested, unnecessary trauma and haemorrhage is sure to be caused in its passage. With the beak still pointing downward shove the cystoscope into the bladder until you see the base line of the trigone, which is presented as a slight ridge and divides the darker colored trigone from the lighter colored posterior-wall. By carrying the beak along this ligament, either right or left, the ureteric orifices will come into view at its extreme outer end. A novice may mistake a small saccule for the ureteric opening, but this can be avoided if one waits for the efflux of urine. Always hold the

cystoscope so as to look down at the orifice and not sideways. Their size and appearance vary in different individuals. In women they are generally larger than in men, especially in women who have borne children. They usually appear as a small slit or line situated on a slightly elevated papilla and nearby, as a rule, a small artery may be seen. In a few rare cases one ureteric opening may be absent. If this occurs in the male and there is congenital absence of the testicle, the kidney on this side is also probably absent. Before diagnosing an absent ureteric orifice it is a good plan to give a dose of methylene blue and make another examination, then the stained excretion from the orifice will lead to a correct diagnosis. A kidney which is normal discharges two or three drops of urine into the bladder about once a minute. Immediately preceding the efflux of urine the papilla on which the ureteric opening is situated becomes prominent; a slight muscular spasm passes up the ureter; the orifice opens and a small stream of urine issues, mixing with the bladder contents like glycerine and water; the opening remains patulous for an instant, then closes. In examining the ureteric openings note their size, shape and outline, the condition of the surrounding mucous membrane and the character of the efflux. A strong, rapidly repeated efflux from one ureter indicates a beginning dilation of the renal pelvis, due to insufficiency of the other kidney. An insufficient kidney is denoted by a slow and scanty stream, issuing at long intervals, and the urine may or may not contain pus or blood. If a small amount of blood should be mixed with such a slow, insufficient stream, it would suggest chronic interstitial nephritis, but if the blood predominates, it points to a small kidney growth. A profuse haemorrhage mixed with clots (the orifice being normal) is strongly indicative of malignant renal growth. Long, worm-like masses of pus coming from a ureter, is diagnostic of a kidney riddled with abscesses.

A stone in the kidney will cause a variety of cystoscopic symptoms. In the early stage, as a rule, there is intermittent haemorrhage, which may or may not be associated with pain. The efflux of urine is strong and rapid, indicating an irritation in a kidney whose secreting surface is not at all or but slightly impaired. The ureteric orifice is elongated, the lips are dark red, puffy and oedematous, pointing to dilation of the renal pelvis. If those symptoms are associated with pain,

there is sufficient ground for renal exploration. Should the stone remain imprisoned in the pelvis for some time, it is followed by pyelitis. The efflux becomes a dirty yellow and the stream may be rapid or slightly slowed. The orifice is rounded, giving a "punched out" appearance, and the lips are angry red and excoriated. In a later stage the efflux is slow and forceless, the lips ulcerated and the surrounding bladder-wall inflamed, accompanied by the well known symptoms of cystitis. Now if such a case never had renal pains, as sometimes occurs, the bladder would likely be mistaken as the seat of the disease, while as a matter of fact, the primary trouble is in the kidney, and this could be easily differentiated by a cystoscopic examination.

In locating tubercular foci of the genito-urinary tract the cystoscope is indispensable. The cystoscopic symptoms of renal tuberculosis in the first stage, as a rule are not diagnostic, but later in the course of the disease, often before tubercle bacilli are found in the urine vesical changes may be pronounced, and the diagnosis of renal tuberculosis for the first time made.

The cystoscopic symptoms of bladder tuberculosis are a number of minute vesicles about the size of a pin-head, which appear grouped about the ureteric opening. Their walls are glistening at first, apparently containing a clear fluid, which becomes purulent, eventually breaking down and forming ulcers. At this stage tubercle bacilli are present in the urine, and if the ureteric openings are normal the bladder is primarily diseased. After having once diagnosed vesical tuberculosis beyond any doubt, the cystoscope is contra-indicated as it only leads to exacerbation of the disease. Tuberculosis of the kidney is indicated by two characteristic changes of the ureteric openings, i. e. the punched-out orifice and the drawn-out orifice. The punched-out orifice appears as a round hole with apparently no bottom and looks like a minute-well. The drawn-out orifice presents a funnel-shaped entrance to the ureter, which looks as if the ureter was being pulled back. In reality this is exactly what is taking place, due to chronic inflammatory changes resulting in thickening and contraction of the ureter, and is diagnostic of a long standing tubercular kidney. These alterations in the appearance of the ureteric opening associated with the aforescribed bladder symptoms point very strongly to primary renal tuberculosis, even if tubercle bacilli are not to be found in the urine.

Many physicians consider the cystoscope but a toy and the possibility of its being of diagnostic value absurd, but as it becomes more generally used and the vesicle changes more closely observed, I am sure that an accurate diagnosis in the majority of renal and vesical conditions can be made.

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, M. D., BALTIMORE, MARYLAND.

ARUM TRIPHYLLUM.

Physiological Action.—From the provings made with this drug, we see that it has a marked effect upon the mucous membrane, causing a severe state of inflammation, which is characterized by a marked tendency to excoriation, and accompanied by much soreness. The mouth, lips and nostrils, the alæ nasi more particularly, are especially apt to suffer from such a condition, while the system is under the influence of the drug; and clinical experience has amply demonstrated the fact that such appearance of the structure and parts mentioned is a key-note to the remedy.

Therapeutic Action—*Nasal Catarrh.*—Arum triphyllum has been successfully used in nasal catarrh with great soreness of the nostrils and the discharge of a thin, watery fluid from the nose, excoriating the lips and mouth, where coming in contact with the skin. At times the nose feels as if stopped up, although the discharge is quite copious.

Bronchial Catarrh, characterized by an increased flow of saliva, by a dry cough, alternating with loose cough and copious expectoration; and by acrid, excoriating discharges from the nose.

Coughs, as such, are often promptly cured by arum, when there exists excoriation in the throat and larynx; catarrhal inflammation of the vocal organs, hoarseness, accumulation of mucous in the throat.

Public speakers, singers, etc., are frequently troubled with soreness of the throat, more or less cough, inability to control the voice. Usually these complaints depend upon an over-exertion of the voice. In such cases the remedy acts promptly.

In *Stomatitis* of a malignant form, arum will succeed in controlling the violence of the disease, when other remedies fail.

The buccal cavity, in these cases, presents one excoriated, raw surface, the tongue is red, with elevated papillæ and partakes of the excessive soreness, the lips are dry and cracked, the saliva runs from the mouth in a constant stream, excoriating the skin wherever it touches; in some of these aggravated cases we find high fever, accompanied by great thirst and a very offensive odor from the mouth.

Scarlatina.—In the treatment of scarlatina we have in arum triph. a valuable remedy. It is not of any use in the common and mild form of the disease; but when we have soreness of the nostrils, dry, sore lips, excoriations about the mouth, which is cracked and bleeding at the corners, swollen lips, easily bleeding, and inability to open the mouth, on account of the excessive pain occasioned by the effort, then no remedy is of more importance than arum. The most certain and unfailing sign that arum has not only begun to develop its curative effects, but will surely continue to improve the condition, is the frequent and profuse discharge of pale urine.

Typhoid Fever.—It is no rare thing to find a very similar state in typhoid fever, and should such a condition exist, the remedy must be carefully studied, with a view of prescribing it. The commissures of the lips and the lips themselves are fissured; the patient picks constantly on his lips until they bleed; the nostrils are full of crusts and the patient has constantly the finger in his nose; the mouth and throat are so painful, refuses food and drink on account of the suffering felt in masticating; fetid breath, great restlessness, delirium, insomnia, suppression of urine.

ASAFÆTIDA.

Physiological Action.—Distinct effects follow the administration of a single grain. The administration of small doses causes alliaceous eructations, which often continue for twenty-four hours; the digestion is impaired; there are burning sensations in the fauces; there is pain, fulness and oppression of the stomach; the abdomen becomes distended with flatus, which, when discharged, is of a very fetid and disagreeable character; there is frequent inclination to evacuate the bowels, and the discharge is thin and watery. The urine becomes acrid, and communicates a sense of burning. The pulse at the same time is quickened; the head becomes more or less affected with flying pains, often attended by much giddiness; and various nervous and hysterical phenomena make their appearance. The

menstrual period is advanced. The sexual desire also becomes excited. Like the pulse, the respiration becomes quickened, and the secretion of the bronchial membrane is promoted.

In larger doses, say ten to thirty grains, asafoetida increases the secretions both of the pulmonary organs and of the abdominal ones, especially those of the liver and bowels, the peristaltic action of which it augments. Appetite and digestion are quickened; morbid secretions of the mucous membrane are improved in quality; and if intestinal worms be present, they are expelled.

Larger doses than those indicated cause colic and heat in the abdomen, attended by nausea, vomiting and diarrhœa.

Upon all parts of the organic system, asafoetida in moderate doses appears to operate as a wholesome stimulant; and, especially in hysterical subjects, among other good results, it leads to improvement of vision and enlivening of the spirits.

Therapeutic Action—Hysteria—The symptoms of asafoetida, if viewed in their totality, represent a pathological condition which may aptly be termed hysteria or hypochondria. The symptoms seem to arise from an irritation of the abdominal ganglia which are in supervisory relation with the hepatic system. The sexual system is likewise very much involved. We are justified in recommending this drug when such symptoms as asafoetida is capable of exciting, constitute characteristic symptoms of the case. We may have tightness of the head, irritation of the eyeballs as if grains of sand were lodged between the lids and the eyeballs, sensation as if a cold wind were blowing upon the eyeballs; dryness and burning in the œsophagus, cutting and crampy pains in the umbilical region, globus hystericus, watery discharges from the bowels, or constipation with continual urging; dark colored urine having a pungent odor; oppression and constriction of the chest, with tickling in the larynx, inclination to cough, expectoration of mucous; creeping chills, mingled with flashes of heat, hurried and small or also strong and excited pulse; the sexual functions may be abnormally excited and this abnormal excitement may arise from continued and unnatural abstemiousness. The spirits are depressed or fitful. As detached members of this series we may be called upon to prescribe for *Hysteric Hemispheria* with flushed face, heat in the head, dryness of the eyes and consensual gastric derangements such as rancid taste in the mouth, distention of the bowels, rumbling, diarrhœa or constipation.

Globus Hystericus, as if the peristaltic motions of the intestinal canal were carried on in the reverse order.

Diarrhœa or constipation with watery discharges, or soft papescent and fetid stools or costiveness with continual urging, and scanty discharge of hard, dark-colored and badly-smelling feces; the urine is likewise darker than usual, and has a strong, ammoniacal odor. This condition of the bowels is accompanied by distension of the abdomen, rumbling of the bowels, cutting or crampy pains either preceding or succeeding the above discharges.

Cardialgia when the attack is characterized by cutting pains in the umbilical region, crampy pains in the stomach, burning and soreness in the stomach and epigastrium, increased by pressure being made upon the part, nausea and inclination to vomit, without any vomiting taking place.

Indigestion comes within the curative range of this drug, when there is much cutting, stitching pain in the stomach, disordered appetite, with craving for liquors or wine; rancid eructations, great flatulency and belching of flatus, diarrhœa or constipation, palpitation of the heart, nervousness, restlessness, sensitiveness. Enormous meteorism of the stomach is a most prominent and reliable symptom.

Hysteric Asthma.—Our provings show that asafoetida causes a spasmodic constriction and oppression of the chest, with occasional stitches in the chest and a burning sensation under the sternum in the middle region; these symptoms are accompanied by slight alteration in the pulse which is rather more accelerated and smaller than usual. This condition of the pulse would seem to show that the character of these symptoms is that of spasm and congestion. An attack of this kind may occur more or less paroxysmally as a form of hysteria. The symptoms may represent a case of hysteric asthma or hysteric pulmonary congestion which may terminate in loose cough with expectoration of mucus.

Neuralgic Rheumatism.—We have seen that asafoetida produces rheumatic pains which seem to be of a nervous character. Hence in neuralgic rheumatism, or rather in nervous pains of a rheumatic character without any apparent signs of congestion, asafoetida may prove useful. The pains are drawing and tearing and affect the articulations of the jaws, and may invade the posterior cervical muscles as far as the arms, or they may be felt in both the upper and lower extremities.

Our provers generally found relief from their pains by a walk in the open air; in determining the homœopathicity of our drug to a given pathological group, this fact may be of importance.

ASCLEPIAS TUBEROSA.

Physiological Action.—It expels wind, relieves pain, relaxes spasm, induces and promotes perspiration, equalizes the circulation, harmonizes the action of the nervous system, and accomplishes its work without excitement; neither increasing the force or frequency of the pulse, nor raising the temperature of the body. It is of special service in the treatment of affections involving the serous membranes, as pleuritis, peritonitis, etc.

The most active apparent influence of this agent is upon the sudoriparous glands. It is distinctively an eliminative agent of general utility. It is mild in its influence, but gives good results.

The eclectics recommend it for *pains* in the *chest* unaccompanied by prominent symptoms, acute, sharp and cutting, recurrent or persistent in their character; they advise it in doses of half a dram every two or three hours and persisted in for a few days.

Therapeutic Action.—Among the provings we find the following as the most prominent: Pain in the forehead from coughing; fluent coryza with much sneezing; bilious and painful diarrhoea; soft, fetid stool, preceded by rumbling, and followed by urging to stool; dry cough, with constricted sensation in larynx; dry, hard cough, with pain in abdomen and forehead; sharp cutting pain behind the sternum, aggr. by drawing a long breath, or moving the arms, by singing or loud speaking; the spaces between the ribs, close to the sternum are sensitive to pressure; acute pleuritic pain in right side, with dry, hacking cough, and scanty mucous expectoration; the pains in the chest are *relieved by bending forward and aggr. by motion*; pain beneath the left nipple, with palpitation of the heart; pricking pains in the region of the heart; contractive pain in the heart; high fever, with hot sweat.

BALSAM OF PERU.

Balsam of Peru is an analogue of copaiba, cubeba, chima-phila, stannum thuya and uvaursi.

Its sphere of action is upon the *mucous membranes*, especially those of the respiratory tract, its special indication is for

mucopurulent discharges—yellow, green and fetid. The pathological condition calling for its use is *torpid indolent ulceration*, or *purulent catarrh*. *Chronic, purulent, fetid anterior or posterior nasal catarrh, with or without ulceration.* *Coughs*, with copious expectoration of thick, yellow, green and fetid pus.

This condition occurs commonly in old people, and scrofulous subjects, and may arise from *laryngitis* or *bronchitis*, or neglected catarrh of these organs. It will not cure pulmonary tuberculosis, but may act as a useful palliative.

The most brilliant results are obtained from its inhalation by means of the steam atomizer. By this means the finely divided atoms come in direct contact with the diseased surfaces. If triturated with equal parts of carbonate of magnesia and sugar, or pulverized by glycyrrhiza, it will mix with water, otherwise it clogs the instrument. Make of the *ix. trit.* thus prepared, a solution representing in strength the *2x. dil.*, and have its spray inhaled three times a day, each inhalation lasting for five minutes.

Cough after Pneumonia, when it is loose, thick, yellow and fetid (one tenth dil.); also in *Suppression* of the accustomed expectoration in bronchial affections. (*6th dil.*).

Not only in purulent discharges from the bronchia is it useful, but it has cured cases of *gastric catarrh with obstinate vomiting of food mixed with mucous*, *chronic mucous catarrh of the bowels* (sometimes called chronic dysentery), *catarrh of the bladder*, and even obstinate *leucorrhœa*, uterine and vaginal, in which last use injections of the *Aqua bal. Peru*, such as recommended for inhalation.

A cerate of the balsam is an excellent application for *indolent ulcers*, *cracked nipples*, cracks in the fingers and hands, or chapped lips.

It is said that the most inveterate case of *itch* is cured promptly by one application of the pure balsam, warmed and rubbed all over the surface of the affected skin.

BAPTISIA TINCTORIA.

Constituents.—Baptisin (a bitter glucoside), baptin (a purgative glucoside), baptiloxin (a poisonous alkaloid), resin, fixed oil.

Physiological Action.—When fresh and taken in a sufficiently large dose baptisia causes violent vomiting and purging. In poisonous doses there is an acceleration of respiration and

reflex activity followed by death from central paralytic asphyxia. From the very beginning the drug shows a marked effect upon the abdominal viscera, namely, stomach, liver, gall-bladder, intestines, and upon the kidneys. It produces a yellow coating of the tongue, flat, bitter taste in the mouth; pain in the stomach and in various abdominal regions, accompanied by rumbling in the bowels, and aggr. by motion. These effects continue all through the proving. There is also a well-marked effect upon the nervous system. There is a peculiar pain in the head, temples and eyes, to be described later on; drawing pains in various parts of the body, aggr. by motion; restless sleep and frightful dreams,—developing in the very beginning, growing in intensity as the drug-effects become more and more defined, and decreasing as the amounts taken are lessened and the power of the drug force is wearing itself out.

The great confusion of sight; the partial paralysis of the eyelids; the feeling of intense pressure upon them, even as if they were being pressed into the head; later, soreness of the gums and teeth, with bleeding of the former from pressure, indicate that peculiar power to prostrate and to disorganize, which has made a tendency to putrescence so valuable an indication of baptisia in the sick room.

Dr. Hale calls attention to the following points:

1. All the symptoms, even the paralysis, appeared within a few hours after taking the drug, and disappeared before the expiration of twelve hours.

2. The appearance, six weeks after, of livid spots all over the body, without any special discomfort. While it may be doubted if these were the result of proving, there are some peculiarities in the nature of baptisia, which render it more than possible.

3. From the ten-drop dose he had numbness and prickling; from the twenty-drop, a sensation of paralysis, with numbness and prickling; and, finally, from the thirty drop, actual, but transitory, paralysis occurred. These symptoms and the mode of their appearance, denote something more than a catarrhal or rheumatic attack. Only a sudden and profound impression on the central nervous system could induce such effects.

Therapeutic Action.—Although this remedy covers many grave and important morbid conditions, it has not a very wide range of action. It seems to affect principally the *blood*, impairing its integrity, the nervous system, which it deprives

of its normal tonicity, and the mucous surface, which under its influence ulcerates and takes on inflammatory action, with a decided tendency to unhealthy, fetid discharge.

An examination of the provings shows, among other head symptoms, the following: Tightness across the forehead, with pain over the right eye. Dull, pressive pain in the forehead; sharp pain in both temples, feeling as if the forehead would be pressed in. Dull, hard headache, worse by moving. Feeling as if the skin of the forehead would be pulled to the back part of the head, with a numbness of the head and face. Vertigo; dullness, swimming sensation in the head like that often experienced before the operation of an emetic. Severe frontal headache with pressure at the root of the nose; heavy pain in the occiput. Peculiar feeling of the head which is never felt except during the presence of a fever; excitement of the brain, such as precedes delirium. The vessels of the head are full; the head feels too large. Heavy ache in the head day and night, causing a sensation of wildness; noise increases the headache. Vertigo. Aching pain in the occiput from ear to ear, and from the vertex to the nape of the neck.

In the common forms of headaches the remedy is of little importance. In those distressing headaches, however, which precede or accompany fevers of various types, with a sense of general indisposition, lassitude, coated tongue, etc., and which in themselves form a most unpleasant feature of those diseases, the wild indigo will do excellent service. If prescribed in the very earliest stage of such a disease, the remedy will not only relieve the headache, but shorten the disease itself, and really forestall a long and tedious illness.

Clinical experience, ever enlarging old boundaries and developing new facts, has demonstrated that in the wild indigo we have a good remedy in the following diseases:

Stomatitis.—Dr. Walker reports to have cured with it acute stomatitis at a time when diphtheria was prevalent. The patients were feverish; the mouth hot and red, and on the mucous membrane of the buccal cavity were numerous canker spots and superficial ulcerations, surrounded by red areolæ. The breath was fetid and there was present in every case profuse salivation.

We find among the symptoms of baptisia, soreness of the eyeballs and a stiffness on moving them; the eyes feel as if they were being pressed into the head, with great confusion of sight;

bloated feeling of the eyes; the eyes occasionally glistened; there is a disposition to have the eyes half closed; soreness in the front part of the head upon moving the eyes or turning them upward; soreness of the eyeballs with burning and slight lachrymation; congestion of the vessels of the eye; they look red and inflamed.

Aphthæ.—In *aphthæ*, baptisia has been used to a considerable extent. *Aphthæ* of the mouth, particularly those cases of long standing, which extend from the mouth through the alimentary canal, with watery discharges from the bowels; aphthous diarrhœa. Derangements of the mucous surface generally, vomiting and purging; sore mouth of nursing infants and sore mouth of consumptives.

In *Diphtheria*, baptisia has been found a valuable remedy. The indications for its use are clear—fullness of mucous tissues, especially of the throat, with bluish discoloration. In a majority of cases the breath will be fetid. This bluish appearance of the mucous membrane is quite peculiar to wild indigo, and if you add this symptom, with its profuse salivation and its excessive fetor, to the symptoms experienced by Dr. Burt, you can see why it has proved so excellent a remedy in *ulcerated* and in *mercurial sore mouth*.

Baptisia has caused a yellow coating along the center of the tongue; tongue coated yellow, followed by a brown coating in the center, the edges being red and shining; the tongue feels thick and swollen; numb, pricking sensation in the tongue. Flat taste in the mouth and loss of appetite. Dull pain in the epigastric region, frequent recurring and aggr. by turning over or moving; constant pain in the epigastric and hypochondriac regions aggr. by motion.

Dyspepsia, accompanied with irritability of the stomach, acid eructations, griping pains and looseness of the bowels, with frequent small and offensive stools.

In the treatment of *Dysentery* baptisia plays an important role. It does not correspond to the first stage, but may prove invaluable at a later date.

Stools: Pure blood, bloody mucous; dark, thin, fecal; frequent, profuse as from a violent drastic cathartic. *Aggravation*: In the hot weather, in autumn.

Before stool: Violent colic in the hypogastric region. *During and after stool*. Terrible tenesmus. *Accompaniment*: Dry, brown, tongue, afternoon fever of a typhoid

type; hepatic symptoms; sleeplessness or restlessness, unrefreshing sleep, full of troublesome dreams.

There are two gastric symptoms of baptisia which are worthy of notice; namely:

1. Gone, empty feeling at the stomach.

This symptom is readily removed by baptisia when it is the result of anxiety, grief, night-watching or fasting, *provided the breath is fetid and the tongue dry*. If not, then ignatia or caladium is more appropriate.

2. Nausea, with want of appetite, and constant *desire for water*.

In the beginning of fever this is often a prominent symptom, and may be removed, with all of its concomitants, by this remedy.

Baptisia is best indicated in that type of fever, which is characterized by an extreme depression of vitality; in that stage where the system is just ready to yield to the poison, which has tainted the very fountain of life, causing extreme fetor and absolute foulness of the excretions, a low, continuous fever, dry, parched mouth, sluggish or thread-like pulse, stupid expression of the countenance; bluish and at times half-rotten gums, with sordes on the teeth, an utter carelessness as to the issue of the disease and, often, muttering delirium. When you have a full, bounding pulse; dry, hot skin; a bright, glistening eye; very high temperature of the body; anxious tossing about or extreme restlessness; when you have every appearance of the wildest arterial excitement, *aconite* is your remedy.

If the patient complains of being very tired; has a pale or crimson looking countenance; is nervous, drowsy and feverish, with cold hands and feet and complains of his head aching and of its being too heavy and big, *gelsemium* will probably cure.

Typhoid Fever.—It was for a time supposed that its use was called for in all stages of this malady, but more recent observations seem to prove that its period of greatest usefulness is during the premonitory and first stage of all fevers of an organic type. I care little what the stage of a disease may be, baptisia will act curatively, if the symptoms indicate it; *and under no other consideration*. If baptisia shortens the course of a typhoid fever, it can do so only, if the drug force is homœopathic to the morbid force which produces the disease and its symptoms; and if such a case were not treated and

cured by baptisia in the *first stage* it would soon develop symptoms which would call for it so distinctly, that any one would detect that homœopathicity to the case, upon whose existence alone depends its power to cure. Let us banish the hope of curing upon *general principles*, and realize at once that our success as physicians depends upon our power to individualize.

The testimony is too large and authoritative to be set aside that it possesses a real abortive or preventive power over such fevers, if given at the proper time. If prescribed for the following characteristic conditions and symptoms, it will arrest the disease which, but for its influence, would end in the typhoid state.

A *condition* of great prostration, when typhous epidemics abound, at any season of the year.

General *malaise*, with a feeling as if one had been bruised all over; cannot lie on either side long because the part on which he is lying becomes sore; pressure on any part of the body soon causes soreness.

The extremities feel too large, tremulous, with "thrilling" sensations in them.

General fetid odor from the body, the breath, and all the excretions.

General *heat*, with very dry, red, or brown, parched tongue, and dry throat.

Head heavy, confused, internally sore, with a feeling like that preceding delirium.

The following symptom is particularly characteristic of baptisia:

She cannot go to sleep because she cannot get herself together. Her head feels as though it were scattered about, and she tosses about the bed to get the pieces together. Sometimes the patient thinks that her legs and arms belong to somebody else, and that, consequently, there are strangers in bed with her.

Hectic Fever.—The slow, hectic fever which accompanies pulmonary consumption is said to be much relieved by the use of baptisia.

Taking the one symptom, "putrid odor of the discharges, with dark red or ulcerated mucous membrane," it has been used extensively in *chronic sore mouth*, *whether mercurial or cachectic*, in *malignant dysentery or diarrhœa*, *offensive leucor-*

rhæa or *lochia*, and even *offensive ulcers on the skin*. It is prescribed as a topical application as well as internally. It appears to resemble, in its topical effect, chlorate of potassa and carbolic acid. In *putrid angina* and *diphtheria* it aids the action of *ars. iod.*, *phytol*, and *merc. cyanate*. One drachm of the tincture to four ounces of water makes an efficient gargle in such cases.

One peculiar symptom indicates *baptisia* in some sore throats. The throat may look dark purple, livid and *as if* very painful, but it is not.

There is one condition in which it is specific, namely, in *threatened miscarriage* from mental depression, shock of bad news, watching and fasting, or from low fever. In case of death of foetus in utero, the mother often falls into a condition in which the "dreadful sinking at the stomach," fetid breath, dry, brown tongue, and great prostration, with or without fetid vaginal discharge, are the prominent symptoms. Here the *baptisia* acts well, preventing blood poisoning, and aiding *caulophyllum* or *ergot* in expelling the decaying substance.

The provings made, developed disinclination to think; restlessness; extreme dullness; lack of interest in what is going on. Utter listlessness is one of the most reliable characteristics of the remedy. The sleep is disturbed by dreams which often become frightful. This, and constant restlessness during sleep, are symptoms of nearly constant occurrence in typhoid fever.

THE LAW EXEMPLIFIED.—Thomas Simpson, M. D., in *Homœopathic World*, illustrates his short paper upon this topic by several cases which show how promptly the well selected remedy acts. A woman, aged fifty years, had been ill for five months prior to the doctor's first visit. She had been losing bright red blood partly mixed with clots. The slightest examination increased the uterine hemorrhage. There was a pain in the right ovary, which was quite tender. *Ustilago maidis*, in second dilution, every half hour, quickly relieved. The remedy produced a perfect cure.

A violent epistaxis, which had resisted the usual local treatment by styptics and by plugging, yielded to *Phosphorus*, prescribed upon Hahnemann's dictum,—“small wounds bleed much.”

The author remarks that the broncho-pneumonia of aged people yields promptly to first *Byronia* 3x., then *Hepar* 6., next *Antim. tart.* 3.

EDITORIAL.

STATE REGULATION OF THE PRACTICE OF OSTEOPATHY.

A BILL has been introduced into the Senate at Harrisburg with the purpose of regulating the practice of osteopathy in Pennsylvania. The contention is made on its behalf that legislation with somewhat similar purposes has been enacted in not a few other States, and that this form of medical treatment has become recognized in the favor of a sufficient part of the public to justify a measure of legalization.

It is stated that there are two hundred and fifty practitioners of osteopathy in Pennsylvania. If this be true, it is time for the medical profession and the public to seriously consider a plan for their disposition as medical practitioners.

At the present time practitioners of osteopathy successfully evade the laws regulating the practice of medicine by claiming they do not administer drugs. It seems almost incredible that this sophistry should have apparently deceived both the public and those whose duty it is to see that the medical laws are executed. The laity do not seem to realize that the modern physician is more than a mere "pill man," and that in fulfilling his obligations to the public and to his patients, the administration of drugs is, in many cases, one of the least important of his duties.

It is a well known fact that practitioners of osteopathy assume practically all the prerogatives of doctors of medicine, except that they do not administer drugs, and treat almost all forms of disease which present themselves. The following is a list of the diseases, taken from a recent publication by a well-known osteopathic physician, which he claims can be successfully treated by osteopathic methods:

Heart and lung diseases, pneumonia, hemorrhages.

Nervous diseases, as general nervous prostration, facial and general paralysis, headache, sciatica, lumbago, tic douloureux, St. Vitus' dance, locomotor ataxia, all forms of neuralgia, paralysis, etc.

General Diseases—Loss of voice, enlarged tonsils, incipient consumption (*sic*) asthma, wry neck, catarrh, granulated (*sic*) sore eyes, pterygium, erysipelas, scrofula, spinal curvature, goitre, eczema, rheumatism, eye and ear affections.

All Dislocations—Hip-joint diseases, milk leg, varicose veins.

Liver and Kidney Diseases—Bright's Disease, gallstones, diabetes.

All Stomach and Intestinal Affections—Catarrh of the stomach, dyspepsia, constipation, piles, flux, dysentery.

Female Diseases—Irregular and painful menstruation, prolapsus, leucorrhœa, barrenness.

Included in this list are infectious diseases, acute and chronic inflammations, functional and organic disorders, and in fact types of all the pathological conditions to which human flesh is heir.

Certain qualifications are necessary, leaving the question of drug therapeutics entirely out of the question, before any individual can successfully undertake to treat such a variety of morbid conditions. First, he must understand the normal structure and function of the various organs and tissues of the body. Second, he must be familiar with the pathological changes to which they are subject. Thirdly, he must understand the fundamental principles and methods of surgery. Fourthly, he must have an accurate knowledge of obstetrics. Fifthly, he must understand the prophylactic, dietetic and general hygienic measures to be carried out in the treatment of the sick. Sixthly, *he must be able to correctly diagnose diseased states, both for the purpose of proper treatment and in order to prevent the spread of dangerous epidemic diseases.*

Experience has demonstrated, both to the profession and to the laity, that for a man to acquire the knowledge and experience necessary to fulfill the above mentioned conditions, requires at least four years of study and training.

In the average medical school but a small proportion of time is devoted to a study of drugs and their administration. The osteopathic institutions devote fully as much time, proportionately, to osteopathic therapeutics. It is therefore evident that an osteopathic college would require fully as much time as any other medical school to properly train students to treat the sick. Many individuals now engaged in the practice of osteopathy have had but one or two years' training, and we are informed

that not a few have begun the public practice of this art after a three months course of lectures, or even after a course by mail.

A State law regulating the practice of osteopathy is, therefore, urgently needed, and we believe steps should be taken to secure this, as the actions of incompetent practitioners of this system of therapeutics are a menace to the public health and derogatory to any worth which the system may possess. The duty of the State in this matter does not consist in discriminating between schools or systems of medicine, *but in requiring, without prejudice or partiality, of all who seek a license to practice for gain on the lives of fellow beings a minimum preliminary and professional training.* Osteopathic practitioners should be granted a license when they conform to the same qualifications required of physicians of all other schools, i. e. attendance upon a four years' course of lectures and clinics, and the passing of the regular examination as given by the State Medical Board on anatomy, physiology, pathology, etc., with the exception that questions on osteopathic therapeutics be substituted for those on medical therapeutics. It is but just to them, also, that they be represented in the State Medical Board by men who have already shown their proficiency by having passed the necessary examination.

No competent practitioner of osteopathy could object to these requirements which are just to all and impartial to none. Those who are not capable of meeting these qualifications are a menace to the public health, and should be placed in the same category as other illegal practitioners and subject to the penalties which the law provides.

COMMERCIAL BRIBERY.

Prominent members of the medical and other professions are, from time to time, favored with communications from publication and financial firms presenting confidential propositions. While on the face of these communications, everything is apparently straight, nevertheless said confidential propositions must be regarded as debasing. In a general way the propositions are to the effect that their recipient is to look into the matter and if he is satisfied that it is a good thing, he is expected to write a letter of endorsement and then will be presented with "the goods" without any charge to himself. In other words, men who are prosperous and in high positions,

are expected to use their honored names,—names made honorable by the estimation in which they are held by the rank and file,—for the purpose of “raking in” the rank and file which elevated them. The whole thing is so disgusting as to admit of no further comment. A mere statement of facts speaks louder than lengthy remarks.

THE RELATION OF HOMŒOPATHY TO SERUM THERAPY.

In an editorial in our January issue, entitled “The Present Status of Serum Therapy,” reference was made to the views of Dr. R. S. Copeland regarding the relation of serum therapy to the law of similars. We learn that we have unintentionally misinterpreted Dr. Copeland’s views on this subject. We apologize to Dr. Copeland for the error and take great pleasure in presenting to our readers a personal communication from Dr. Copeland, stating his opinion regarding the matter in question:

ANN HARBOR, MICH., Jan. 6, 1905.

TO THE EDITOR OF THE HAHNEMANNIAN MONTHLY:

To-day my attention was called to your editorial, “The Present Status of Serum Therapy,” published in the current number of the HAHNEMANNIAN MONTHLY. In the first paragraph of this interesting article you state: “As Dr. Herbert Moore ably stated in a recent paper before the Minnesota State Homœopathic Institute, and Dr. R. S. Copeland also pointed out in a paper read before the last session of the American Institute of Homœopathy, the basic principles of serum therapy appear to be in accord with the laws of similars.”

It seems a shame to weaken the force of any argument of yours, even by the removal of so unimportant a feature as my opinion regarding it. In my paper, “In Defense of the Attenuated Drug,” to which you refer, no attempt was made to reconcile the theories of artificial immunization with the law of similars. Your logical mind built up the argument as it should have been presented and your noble charity acknowledged me an equal capacity for reasoning, therefore, you dozed off when I reached Ehrlich’s hypothesis. Unfortunately, my mind did not react properly and, at that time, I did not feel called upon to consider the philosophy of the serum treatment. Your reference to me, therefore, will not help your argument.

You will remember that at that meeting Dr. Eldridge C. Price presented a paper on "The Modus Operandi of Diphtheria Antitoxin and its Relation to Homœopathy," also, Dr. Wm. C. Goodno read an essay entitled "Optimism versus Pessimism in Therapeutics." In discussing these I made the statement that I do not believe diphtheria antitoxin is homœopathic to diphtheria, nor do I believe that its usefulness is an evidence of the truth of our theory.

Having said this much to correct the record, permit me to state my views on the serum treatment. I hesitate to do this, but inasmuch as the whole subject is a mooted one, possibly I will be forgiven a modest statement of individual opinion. What I shall say here will relate solely to diphtheria and the diphtheria antitoxin.

The dominant school has practically conceded the Hahnemannian idea that disease is dynamic. Perhaps all physicians are not agreed as to what is meant by dynamic disturbance, but the modern ideas are making it easier to understand some things heretofore obscure. Ehrlich, to whom you refer in your editorial, offers an hypothesis, in the terms of which we can explain all the phenomena of infection and immunity. To my mind the experiments of Ehrlich and others prove that disease is a disturbance of the chemical equilibrium of the cellular elements of the body, interfering with their power of metabolism. There can be no dynamic disturbance, therefore, and hence no disease, until the cell is attacked.

In diphtheria, so called, there is actually no dynamic disturbance until the toxin leaves the blood stream and is appropriated by the bodily cells. Until the cells are thus attacked, any treatment to be of avail must be such as will, (a), increase the power of resistance of the cells having an affinity for the peculiar toxin of diphtheria, by supplying their needs, or, (b), it must stimulate the cells to throw off elements which will combine with and neutralize the toxin, or, (c), it must directly furnish such a neutralizing agent in quantity sufficient to neutralize the toxin.

If antitoxin acts in either of the first two ways, in present light, at least, it may be claimed to be homœopathic. Certainly we do not know positively whether the homœopathic remedy acts by either, both, or neither of these methods, but we have a right to suppose it acts by one or the other, or both. I believe that belladonna is of positive value as a prophylactic against scarlet fever, and that it acts by one of these two meth-

ods. Possibly some future investigator may find a remedy which acts in the same way in diphtheria, but, with present knowledge, it seems to me conclusively demonstrated that antitoxin acts by the third method, that is, it is a chemical applied directly to the toxin in the blood, toxin as yet unattached, or only lightly attached, to any cell of the body, and that it neutralizes the toxin exactly as an alkali neutralizes an acid.

In other words, I believe antitoxin is useful and only useful before there is actually a dynamic disturbance, and that its use is purely a chemical proposition with no relation to real therapeutic procedure. It has been proven to be of no value in diphtheria after the first half week following the local external signs and materially differs from remedies chosen by the laws of similars. Its place in medical practice is in that closet labeled "Antidotes."

As Homœopathic physicians it is our privilege to employ it or not, deciding upon the same basis as we would decide whether it is or is not too late to administer an antidote to one who has swallowed a poison. But as homœopathic physicians, we have stopped far short of our full duty if the antitoxin is the sum total of our treatment in any case of diphtheria. It may be the wedding march in the ceremony, but the clergyman's part bears a more important relation to the marriage rite. So, my dear Editor, in my humble opinion, the serum treatment, at least as it relates to diphtheria, is hardly more than the organist at the wedding. After the disease is actually present, the homœopathic remedy, chosen in the good old way, will be my treatment for diphtheria. I fully appreciate the value of antitoxin used early, but at that stage or any other, if my reasoning be correct, its use is not in accord with the law of similars, but it is employed simply for its chemical affect.

By a coincidence, I discussed the same question more fully in the current number of the *Medical Century*.

Most cordially,

R. S. COPELAND.

We have read with much interest, the views which Dr. Copeland has so ably and logically set forth on this truly mooted subject. It must be conceded that in our present state of knowledge a positive statement of the *modus operandi* of curative serums would be impossible. Dr. Copeland considers three ways by which a curative agent may act: (a) by increasing the power of resistance of the cells having an affinity for

the peculiar toxin of diphtheria, by supplying their needs; (b) by stimulating the cells to throw off elements which will combine with and neutralize the toxin; (c) by directly furnishing such a neutralizing agent in quantity sufficient to neutralize the toxin. He supposes that a homœopathically selected remedy acts by one or both of the two methods first mentioned. He then advances the hypothesis that diphtheria antitoxin acts by neutralizing the toxin exactly as an alkali neutralizes an acid. On this account he groups it among the "antidotes."

We do not feel that this simple theory explains all the phenomena of the case in question. We know that when used at a proper time diphtheria antitoxin not only counteracts the toxemia, but also prevents the further growth and spread of the Klebs-Loeffler bacillus in the body and causes the pseudo-membranes to be cast off. The Klebs-Loeffler bacillus, however, grows readily in diphtheria antitoxin in a glass flask. It is, therefore, reasonable to assume that when introduced into the body the diphtheria antitoxin stimulates the cells to throw off elements which destroy the bacteria, as well as neutralizing their toxins. This is one of the methods by which Dr. Copeland assumes the homœopathic remedy acts—(b).

That the diphtheria antitoxin frequently fails to cure cases that have run on for four or five days does not discredit the specific action of diphtheria antitoxin against the Klebs-Loeffler bacillus and its products. In such cases we have to combat a streptococcic infection in addition to the Klebs-Loeffler infection, as well as a variety of symptoms due to functional and organic derangements of vital organs brought about by the previously existing toxemia. Over these latter groups of symptoms and conditions it is evident the diphtheria antitoxin can have no influence.

In formulating an hypothesis as to the *modus operandi* of sero-therapeutic agencies, it is important to remember their origin. Diphtheria antitoxin is the product of the activity of living cells in response to stimulation by specific substances, capable of producing the symptoms and pathological changes which we find in diphtheria. That it is more practical to employ the cells of a horse for the production of antitoxin does not alter the principle of its production. Antitoxin can be produced in the human body in precisely the same manner. Wright, for example, inoculates the human body with attenuated cultures of the bacillus typhosus, and has produced an ac-

tive immunity against typhoid fever. Pasteur has done the same thing in rabies.

The essential principles of serum therapy can be summarized as follows: *To cure bacterial diseases, we begin by bringing into contact with living cells specific pathogenetic substances (attenuated toxins) capable of producing symptoms similar to those we desire to cure.* We grant that our knowledge of serum therapy is as yet far from complete, but we believe that known facts justify us in reiterating the statement that "the basic principle of serum therapy appear to be in accord with the law of similars."

G. H. W.

DIAGNOSIS OF DISEASE IN THE UPPER ABDOMEN.—*C. D. Hill* confines himself to those diseases which are now classed as surgical. In this region the stomach is the organ of most interest, not only because of the symptoms which it causes when diseased, but it also is apt to be disturbed in disease of the adjacent organs. The group of organs in the situation mentioned include the stomach, pylorus, gall-bladder, and bile ducts, the pancreas and transverse colon. The author reports a series of cases illustrative of the subject under discussion. These include stone in the gall-bladder; ulcer of the stomach, with perigastritis; periodic attacks of vomiting, etc. Perforated gastric ulcer, peritonitis, operation and death, cancer of the stomach, diseases of the pancreas, etc., are discussed at length. Hill says: In the greater number of surgical cases, we ought to be able to make a diagnosis by thorough investigations, along the usual lines. But if we find by our diagnosis, surgical measures are indicated, we should not hesitate to offer them; for many pathological conditions can be remedied that seemed utterly hopeless only a few years ago. If, after exhausting all methods, we are still undecided as to our diagnosis, we are doing our patients and ourselves an injustice by persisting in the policy of waiting for more diagnostic symptoms to appear. In such cases surgical alesion is often the basis for the morbid phenomena; a diagnosis should be made or surgical relief attempted.—*Medical News*, January 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

Notes on the Metallic Ferments, Their Action on Metabolism, Their Effect in Pneumonia. By M. Albert Robin. A recent communication made to the Academy of Medicine, Paris.

The following conclusions are reached by this old school writer:

"I conclude, first, that the metals in a state of extreme subdivision are capable of considerable physiologic action, out of all proportion to the quantity of metal used. Second, that the metals, acting in doses heretofore considered therapeutically inert and useless, influencing profoundly the chemical acts of life, are probably destined to take an important place in the arsenal of functional therapeutics."—*Gazette Medical de Paris*, Dec. 24, 1904.

GLEANINGS.

THE TREATMENT OF TYPHOID FEVER BY THE BRAND BATH—WEBER.—The procedure as carried out is as follows: When the temperature exceeds $102\frac{1}{2}$ degrees the patient is immersed in a bath of 75 degrees, briskly rubbed while in the bath, then taken out, dried quickly, and returned to bed. Twenty minutes before bathing the patient is to have one-half to one ounce of whiskey. This treatment was carried out in six cases without any medicinal treatment whatsoever and only one died, he being practically septic before he was brought into the hospital.

Treatment of the Special Symptoms.—1. For colicky pains and tympanites turpentine stupes will often give relief. Mix a teaspoonful of turpentine with a quart of very hot water, wet a piece of flannel in this, wring it out and put it quickly upon the abdomen, and some dry toweling over it. Repeat as often as necessary.

2. *Constipation* during the course of the disease is best relieved by enemata, and an occasional dose of a few grains of calomel to prevent stagnation of the fecal matter can do no harm. Diarrhœa, with not more than three or four stools a day, needs no interference; when it is more frequent and seems to weaken the patient give subnitrate of bismuth or tannalbin in 10 to 15-grain doses three or four times a day.

3. *Meteorism*, due to a more or less paralytic condition of the smaller intestines: Gentle lavage of the colon by means of rubber tube and funnel, has often been of great service to me. In a very severe case of that kind I remember, a few doses of bromide of sodium, 15 grains each, with orange flower water, brought good and permanent relief. The extract of physostigma, 1-6 gr. every few hours, has also been recommended for its effect upon the increase of the peristaltic action of the intestine.

4. *Hemorrhage.*—Acetate of lead (plumbum aceticum) 2 grs., the aqueous extract of opium (extractum opii aquos) 1-3 gr., with 10 grs. of sugar of milk, every two or three hours until better, and ice-bag over the abdomen.

5. *Perforation.*—Hypodermic of morphia, $\frac{1}{4}$ grain at least, small doses of brandy or whiskey against collapse; aporatomy may become necessary.

6. *Delirium* and other severe nervous symptoms are best prevented by the Brand bath treatment. In cardiac weakness and collapse-symptoms hypodermics of strychnia or camphorated oil are serviceable.

7. *Severer degrees of bronchitis and pneumonia* as a complication are to be treated on well known principles, and great attention to be paid in these complications to the heart and its support.

8. *Typhoid Sepsis.*—There is nothing that I know of that will prevent the development of it as well as the treatment by the Brand bath. Whenever I have met a case of typhoid sepsis in recent years I have relied for its treatment on the free use of stimulants, and particularly also, on Credé's Collargol, either rubbed in in the form of an ointment over various parts of the body, half-drachm doses every three hours, or injection of a five per

cent. solution of it. One-half drachm at a time, diluted with an ounce and a half of water, into the rectum three times in twenty-four hours.

The treatment of the relapse in typhoid fever, coming on within a week after the fever has been normal is essentially that of the original attack.—*The Post Graduate*. Vol. XX, No. 1.

WILLIAM F. BAKER, A. M., M. D.

SERUM DIAGNOSIS OF TYPHOID FEVER BY MEANS OF FICKER'S TYPHUS-DIAGNOSTICUM—*Von Tilling*.—The writer reviews the disadvantages of the Widal test as to its general application by the practitioners and says the above-named method is far more simple. As Widal studied the agglutination and immobilization of the bacilli, both with and without microscope, so did Gruber before him, who also used bouillon cultures in which were dead bacilli, studying them in this condition. It was Widal who showed the dead bacilli to have the same power of agglutination as living ones and the method as suggested by Ficker is based on the observation. This Ficker diagnosticum contains apparently ground bacilli and is absolutely sterile and looks nubia.

For the diagnosis of typhoid fever in a more early stage of the disease, however, this test does not give better results than the original Gruber-Widal test.

According to Ficker, to carry out the test one must begin from 1 to 2 c.c. of blood in the regular way by means of cupping glass, which is then to be set aside in a cool place until the serum is separated. 0.11 c.c. of this serum, which must be perfectly free from red blood corpuscles, is then mixed with 0.9 c.c. of sterile physiological salt solution. This diluted serum is then mixed with diagnostic fluid in the proportion 1.5 and 1.10 in two of the little test tubes, which, therefore, now contains serum dilution of 1-50 in one glass and 1-100 in the second. Then a third glass is filled with the diagnostic fluid alone. The fluid in these three test tubes appears now about equally turbid because of the bacilli in the diagnostic fluid. The reaction is positive, if after from ten to twelve hours, the fluid in the first or second glass begins to get clear, for in this case the bacilli clot together and sink to the bottom. Sometimes the reaction proves positive in a shorter time, sometimes it may take twenty-four hours, but if no clearing of the fluid occurs within this time, the test may be taken as negative. It is hardly necessary to add that all glasses and stoppers must be thoroughly cleansed and sterilized.

This test has the great advantage of convenience, but still there is one great inconvenience connected with it for patient and physician, that of obtaining the blood by means of a cupping glass. Therefore, various propositions have been made to simplify the means of getting the blood and of obtaining the serum. Among other methods it has been recommended to make a rather deep wound and to let the blood run into a test tube or to get it from a vein with a hypodermic syringe and to let it clot in the latter. However, all these modifications do not appear to me to be very ideal for the general practitioner, especially in the country, since one must, without disturbing the specimen, wait for the clotting of the blood and the separating of the serum. For this reason I have tried to make the test by catching from a small finger wound, made by a needle prick, a few drops of blood either on a glass slide or still more conveniently on a piece of filter paper; then I

have let it dry and afterward in the laboratory dissolved it with normal salt in the proportion 1.10. This dilution I have mixed in the required way (1.5 and 1.10) with the diagnostic fluid, and the result was most satisfactory. Naturally the fluid, under these circumstances looks reddish, but in it the whitish flocks of agglutinated bacilli stand out very clearly, and the positive result is most easy to distinguish.

A few words are added about those cases in which the Gruber-Widal reaction proves negative, while all symptoms, tend to the diagnosis of typhoid fever. Most of these cases probably are the so-called paratyphoid fever, caused by one of the group of paratyphoid bacilli. The serum of these patients does not agglutinate the typhoid bacilli but does agglutinate the corresponding paratyphoid bacilli. In those cases where the Gruber-Widal reaction is negative one must try the result with the paratyphoid fever diagnosticum.—*Medical News*, February 4, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE TREATMENT OF THE STUMP IN APPENDECTOMY—SEELIG.—The writer holds that in the ordinary run of acute and "interval" appendicitis cases the most rational method of dealing with the appendix consists in simple ligation followed by cauterization. The method in which, after ligation and removal of the appendix, the stump is inverted by means of Lembert sutures passed through the serous coat of the cæcum is regarded as a dangerous and unreliable one. The stump, it is pointed out, is invaginated into the cæcal wall and not into the cavity of the intestines. If the stump has not been cauterized the infected tissue is buried in a closed cavity; and if the stump has not been cauterized and thus disinfected, the exudate that is inevitably produced is enclosed in a cavity under conditions which are particularly favorable to abscess formation. When the stump is not ligatured but inverted directly into the lumen of the cæcum, the patient is threatened by two serious dangers; peritonitis from free communication of the field of operation with the fæces-laden cæcum, and secondary hemorrhage. The anatomical fact that in a fair proportion of cases the appendicular artery runs in the walls of the appendix is regarded as one of great clinical importance. Reference is made to a case in which free intestinal hemorrhage followed Dawhorn's operation of complete inversion, and the author states that he has not the slightest doubt that the accident of bleeding from the large unsecured vessel in the wall of the appendix is one of not uncommon occurrence. Seelig endeavors in this paper to show by experimental and clinical proofs that the objections urged against his method of simple ligation and cauterization are not tenable. The statement that perforation is likely to occur after simple ligation of the stump is opposed by the author, who, when connected with the Mount Sinai Hospital, of New York, during a period of two and a half years, never met with this accident in the numerous cases in which this operation had been performed. *The Annals of Surgery*, Nov., 1904.

WILLIAM F. BAKER, A. M., M. D.

LABORATORY AIDS IN THE RAPID DIAGNOSIS OF RABIES.—Walter H. Buhlig first mentions Babes' tubercle. It consists of leucocytal thrombi of capillaries and of accumulations of embryonal cells around the vessels and

around the nerve cells of the medulla of a rabid animal. These microscopic changes are found by him with certainty in dogs that have died of rabies, but less constantly in animals that have been killed in the course of the disease. In 1900 Van Gehuchten and Nelis reported a pathological change found in the spinal, gasserian, and pneumogastric ganglions, which consists of a proliferation of cells, probably from the capsule of the ganglion cells. As a result, the space between the capsule and the nerve cell is more or less completely filled up, and the number of cells outside of the ganglion cell envelope is increased. Although this picture is very striking in animals that have died of rabies, it is not so clear in those which have been killed before the disease has run its course. Somewhat similar lesions have been found in other conditions, such as diphtheria, so the clinical history of the animal must be carefully looked into. Its presence, however, is considered almost pathognomonic by those who have worked on the subject. This reaction stands to-day as the most trustworthy aid in the rapid diagnosis of rabies. Recently, Negri has found a structure in the central nervous system of different mammals afflicted with rabies, which he suggested may be a parasite and perhaps the causative agent of the disease. The ordinary fixing agents are adequate to discover it. Mann's method of methylene-blue and eosin is considered the most perfect. The so-called parasites are found in the nerve cells of the horn of ammon, in Purkinje's cells of the cerebellum, in the cortex, principally in the pyramid cells, and sparingly in the pons, the medulla, the spinal cord, and in the various ganglions. These bodies are spherical, elliptical, or pyriform in shape. Their sizes vary from 1 to 1.5 microns to 10, 12, or 15 microns in diameter. Those which are round are at times 22 to 23 microns long and 6.5 microns wide. They are found within the protoplasm of the nerve cell and often within the processes, and often several may be present in one neuron. Two distinct characters are distinguished within the organism: small, round, glistening forms, and large, oval and less glistening central bodies. Negri states that when dogs are inoculated by the sciatic route, the parasites are found practically only in the spinal cord region; when the subdural, intra-ocular, conjunctival, or mucous membrane path is selected, the organisms are found most abundantly in the brain in the usual locations. Negri's general conclusions have been verified by others. Another aid in the diagnosis of rabies is the presence of foreign bodies in the stomach. Like the ganglion cell lesion, it speaks for the disease when it is a positive one, and is noncommittal when there are no such extraneous matters. Leucocytosis is constant in rabies. A doubtful aid is the alteration in the voluntary muscles of rabid animals, as found in rabbits. It is reported that the muscle fibers show a longitudinal division into fibrillas, and many are entirely transformed into such threads. The nuclei are increased in number, and amyloid degeneration is sometimes seen.—*American Medicine*, Nov., 1904.

WILLIAM F. BAKER, A. M., M. D.

THE CAUSES OF CARDIAC INSUFFICIENCY—PRATT.—The condition of the heart muscle determines the clinical course of chronic valvular disease. As the working power of the heart is dependent on the contractility of the muscle fibres and the elasticity of the heart wall, any cause which diminishes these will tend to produce cardiac insufficiency. Fatty metamorphosis has generally been thought to be the most common cause. Fatty degeneration

is of frequent occurrence, but it may be extreme without producing symptoms, and cardiac weakness may be marked in cases in which the myocardium contains little or no fat. Anatomical, chemical, and experimental evidence fails to support the theory that fatty change is the cause of cardiac insufficiency. Other anatomical alterations, especially coronary sclerosis and acute interstitial myocarditis, must be regarded as the most common causes. All cases of muscle incompetence cannot be explained on the basis of definite anatomical changes. It may be due to acute over-distension produced by sudden and violent bodily exertion. In these cases of heart strain the nature of the anatomical or chemical changes is unknown. No justification exists for attributing cardiac insufficiency to nervous disturbances or exhaustion, of the nature of which we know nothing, unless demonstrable lesions, in the myocardium have been excluded with the microscope. The circulatory disturbances in fevers are probably due less to cardiac insufficiency than to paralysis of the vasomotor centre in the medulla. The blood pressure falls, the flow of blood is slowed, the heart is only partially filled, and finally the circulation sinks to such a low level that life cannot be maintained.—*Johns Hopkins Hospital Bulletin*, Oct., 1903.

WILLIAM F. BAKER, A. M., M. D.

DISEASES OF THE SKIN DEPENDENT UPON ERRORS OF METABOLISM.—*L. D. Bulkley* reviews the underlying principles of metabolism, with the evidences by which its aberrancies may be recognized, and the relation of such abnormalities to cutaneous disorders. Metabolism represents the changes occurring in the system, whereby, nutritive materials and oxygen are transformed into tissue, and retransformed into waste products while, during these processes, their potential energy is being given off in living force and heat. Metabolism is principally affected by (1) the kind of nutriment taken; (2) the action of the digestive organs and ductless glands; and (3) the action of the nervous system. Certain skin lesions, or eruptions, have been credibly reported as connected with or dependent on the generally recognized metabolic conditions of (1) gout; (2) rheumatoid arthritis; (3) diabetes; (4) obesity; (5) scrofulosis. As yet no absolute statements can be made as to the necessary connection of the two, for the same eruptions occur in several of the metabolic affections. The idiosyncrasy of the patient and many causative elements, external or internal, nervous, etc., often determine what form of skin disturbances or alteration shall take place. Errors of diet, disorders of digestion, faulty excretion, and nervous derangement, which have all along been recognized as causative elements in many diseases of the skin, often find their ultimate expression through the faulty metabolism. Metabolic errors are exhibited in the excreta from the lungs, skin, intestines and kidneys; of these the urine best affords a satisfactory indication, as it represents nearly half of the total excreta, and practically all of the nitrogenous and soluble mineral substances together with about half of the water expelled from the system. Complete and minute urinary analysis is a very great aid in discovering metabolic errors, and in establishing proper therapeutic measures for the cure of many diseases of the skin.—*Medical Record*, Nov. 26, 1904.

WILLIAM F. BAKER, A. M., M. D.

URETRAL CALCULUS.—*Willy Meyer* reports an interesting case, in which nephrotomy and later ureterotomy were necessary for the removal of an impacted uretral calculus. The patient, a woman of 29, had had repeated attacks of pain in left loin for fifteen years. This was followed by three attacks of acute pyelonephritis on the left side, the third attack demanding immediate operation. The kidney was found to be of a deep bluish red color, much swollen, and extremely brittle, scattered all over its surface were numerous minute miliary abscesses in which the colon bacillus was found in pure culture. The kidney was incised, and a flexible bougie passed into the ureter, which met with an obstruction about six inches or eight inches below the upper entrance. Drainage was inserted in the renal pelvis, and the wound left open and loosely packed. The patient recovered, but a fistula persisted, through which the greater part of the urine was discharged. Some weeks later the ureters were catheterized, and a stricture found in the left ureter, not very high up. A waxed tipped catheter, inserted immediately thereafter, showed a decided mark. A Röntgen ray picture showed two calculi in the pelvic part of the ureter, a short distance apart, the upper being somewhat larger than the lower one. Two days later the lower calculus was discharged by the urethra. Vaginal examination showed a hard, painful nodule on the left side, about three inches above the mouth of the ureter. It was assumed that the upper stone also had become loosened and descended somewhat. Finally uretral lithotomy was performed, and a rough calculus, the size of a bean, removed. An uninterrupted recovery followed. The patient was again successfully operated upon six months later for a right pyosalpinx and perforated ovarian abscess. Meyer also mentions two patients who died from acute sepsis due to uretral obstruction by stone. He considers it advisable in all cases where profound sepsis symptoms, especially a chill and rapid pulse, accompany the always present renal colic, promptly to resort to operative treatment. In the presence of subsiding symptoms he strongly urges the removal of the stone or stones during the interval.—*New York Medical Journal*, Nov. 19, 1904.

WILLIAM F. BAKER, A. M., M. D.

FOOT DEFORMITY CAUSED BY SHOES.—*E. B. Bradford* presents several illustrations showing how various deformities of the feet are caused by ill-fitting shoes. These result not only in pain and distress to the individual but also in a permanent weakening of the feet. Shoe deformities result from the pressure of a boot crowded backward upon the standing or walking foot. The boot when the foot is used must find resistance somewhere and it exerts pressure according to its shape. The most common deformities are caused by crowding the toes together as the shoe is always made narrower than the natural spread of the foot. This crowding results most injuriously upon the great toe, which is pushed toward the foot and frequently partially dislocated. The boot is then pushed backward upon the foot, and meeting the resistance of the head of the first metatarsal develops by irritating, irregular bony enlargements as well as thickening and irritation of the skin. This does not necessarily result from a short or tight shoe. It will result also from a loose boot which is narrower than the width of the toes. Other deformities are discussed at length, and education of the public to the wearing of properly fitting shoes is insisted upon.—*Boston Medical and Surgical Journal*, Nov. 24, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE PAINS OF TABES—*Gourn.*—In a clinical lecture the sensory phenomena have been considered. In the course of his remarks he says, we are compelled to believe that the symptoms are due to a chemical toxin, what results from syphilis and probably arises in the way the toxin of diphtheria, which causes diphtheritic paralysis, has been proved by Martin to be caused by the organism of diphtheria. This is due to the indirect action of a ferment produced by the organism. The analogy is more pertinent because sometimes the toxin of diphtheria produces exactly the same symptoms as are found in ataxia. The interval between the acute manifestations and its consequences is, however, much longer than in diphtheria.

The pains are usually of early occurrence in the course of the diseases. The association of the pains with rheumatism is of very common occurrence and the patient is at times unwilling to ascribe them to any other cause. They are paroxysmal, of uncertain duration, and as a rule uninfluenced by medication. They are generally characterized as "lightning" and "shooting," varying in frequency. The varieties are (a) *superficial*, (b) *deep seated*.

(a) *Superficial*. They are experienced either on the surface or just beneath it and give rise to "skin" or "superficial" tenderness and what is perhaps most remarkable they occur in places where sensitiveness to pain is somewhat destroyed.

(b) *Deep-seated* pains are usually felt in the limbs or arms and are of a dull, aching paining and at times crampy in character. They are not accompanied by skin hyperæsthesia.

Under the head of deep-seated pains may be classified the "girdle sensations," and also the long-lasting pains situated in various parts of the trunk.

Tabetic Neuralgias.—The pains are usually sharp, shooting. Yet the reflexes are not disturbed and there is no ataxy. This is an early form of disease. The pains exist for years but the disease advances no further. They are not merely a stage in the development, but a variety of the disease.

Source of Tabetic Pains.—The pains must be referred to some part of the sensory neuron which undergoes degeneration. The neuron which depends for its vitality on the ganglion cells of the posterior nerve roots. Also the fibres of the sensory roots which pass into the cord and continue in the sensory path, will have some part to play. Again there are the extremities of the peripheral nerves as a possible source. In the increased sensitiveness that seems to attend nerve degeneration, it can be readily conceived that the pains could arise therein.

Treatment.—Locally, chloroform sprinkled on lint, will give some relief, if it is applied with a covering of oiled silk. Hypodermic injections at seat of pain of solutions of cocaine have been recommended.—*British Medical Journal*, Jan. 7, 1905.

WILLIAM F. BAKER, A. M., M. D.

CONTRACTION OF THE KNEE TREATED BY HESSING'S SPLINT CASE APPLIANCE.—Openshaw reports the treatment of a case of fibrous ankylosis and contracture of the left knee by Hessing's splint case appliance.

When the patient first presented himself the knee was flexed at an angle of 112 degrees and motion was only possible to the extent of one degree. The muscles of the thigh were wasted but there was no paralysis. The

patient walked well with the toes upon the ground, but the left half of the pelvis dropped four inches and there was marked left dorso-lumbar lateral curvature. There were two cicatrices above the external condyle and one over the ligamentum patellae and evidences of extensive tuberculous disease.

Hessing's splint case appliance, with steel-bar traction, was adjusted to the limb and very slowly and steadily the limb was extended until the knee was straightened. This occupied six weeks, but the patient was not incapacitated for a day and there was no pain, oedema or swelling. The movement at the knee joint continued very slowly to increase in extent.

Openshaw thinks every case of fibrous ankylosis and contracture of the knee joint can be straightened by the steel-bar traction method. This method should supersede forcible straightening of the knee under an anæsthetic, which occasionally results in rupture of the popliteal vessels or in lighting up the quiescent tuberculous disease and frequently causes an increase of the pre-existing stiffness of the joint.—*The Lancet*, Jan. 21, 1905.

J. D. ELLIOTT, M. D.

PLUGGING OF BONE CAVITIES WITH IODIFORM AND SPERMACEIN.—Moorhof and Jones describe the plugging, or "filling," of bone cavities with a mixture of 60 parts of finest pulverized iodoform and 40 parts each of spermaceti and oil of sesame. This forms a stiff, yellow mass at the ordinary temperature of the room but melts at 122° F.

Moorhof started this work five years ago and at first used iodoform paste, but soon found that to achieve success a hermetical and perfect filling of the cavity was necessary, and this could only be attained by pouring in a fluid substance which solidified in situ.

Two conditions are essential for success: the walls of the cavity must be aseptic and perfectly dry. The first is not always possible to obtain, but a cavity should only be filled after all diseased tissue has been removed. A simple method of drying the cavity is to drive ordinary air, by means of a double rubber bag or bellows, through formalin solution and then through calcium chloride.

The mixture, after having been thoroughly shaken up, should be slowly poured in and allowed to set, which only requires a few minutes, and then the soft parts united after all bleeding has been arrested. No especial drainage is needed, as a well-filled cavity will neither bleed nor discharge. Existing fistulous tracts in the soft parts, after they have been curetted and disinfected, will afford escape for any lymph which is secreted, and sufficient drainage can be secured when no sinuses are present by not placing the sutures too closely together. But if drainage is used, use gauze and not rubber tubing.

The iodoform plugging protects the granulations from septic disintegration and preserves them entire, therefore organic restoration is accomplished more rapidly and completely than in cases packed with gauze.

The filling is only temporary and is either pushed up by the granulations and expelled, in greater or smaller pieces, or, if the soft parts have healed without leaving any channel of escape, is gradually absorbed. Iodine can be found in the urine during healing and X-Ray photographs show the gradual decrease in the size of the filling.

At first Moorhof only plugged cavities in bone but subsequently he

extended its application to cavities whose walls were composed partly of soft tissues and partly of bone, cartilage, etc. And recently has even packed a large tubercular cavity in the anterior mediastinum. The cases amenable to this treatment comprise the common osteomyelitic affections and tuberculosis of bones and joints. Acute cases of septic osteomyelitis, which are ushered in with violent local and systemic symptoms, are unsuitable as asepsis cannot be obtained.

The steps of plugging bone cavities are briefly: 1st, depletion of the part of blood, if possible, and the application of a tourniquet; if this is not done, the Haversian canals will continue to exude drops of blood for quite a while and thus delay the operation; 2nd, raising of a flap of the soft parts, including the periosteum when possible; 3rd, thoroughly exposing and cleaning out of the diseased area followed by syringing of the cavity with a 1% formalin solution; 4th, drying the cavity; plugging, and suturing the soft parts as described before.

Moorhof's technique for excising and plugging the ankle, knee, hip, wrist, elbow and shoulder joints, and for plugging dental cysts and the antrum of Highmore are given in detail, many of the operations being original. Dermamol has been substituted for iodoform for filling the antrum of Highmore on account of the odor.

Moorhof has now operated 220 cases and has never had to remove the plug on account of the intolerance of the tissues; has never had a case of iodism, and has never seen a so-called "cure with sinus formation," which of course is not a cure at all.

Unfortunately a detailed record of the histories and results of these cases was not given; but in describing the excision of the ankle joint, Moorhof states that all fifteen cases operated upon healed without any difficulty and with the formation of a new joint.—*The Lancet*, January 21, 1905.

J. D. ELLIOTT, M. D.

EYE STRAIN AND EPILEPSY.—A report made by William P. Spratling on the result of three months' attention to the eyes of sixty-eight epileptics at Craig Colony by non-operative methods has shown that the seizures are reduced 44 per cent. In urging an extension of the "experiment" and the employment of an expert ophthalmologist, he says: "Spectacles would certainly lessen the special disease, and the number of seizures, and even if they would not do so, they would tremendously lessen headache, and the digestional troubles." The habit of ignoring the eye-strain factor is both cruel and unscientific.

This writer treated a young lady who had had twenty attacks during the previous three years. Following a correction of the refraction, she went for seven months without the seizure. Later, a tenotomy of each internal rectus was made, with the result that she was able to return to work, and she has had only about two seizures a year since then.—*The Homoeopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

RADIUM IN OCULAR THERAPY.—Darier, of Paris, gives the result of treatment by this agent in a number of affections. An alveolar small cell sarcoma, in which the tumors were situated in the eyelids, conjunctiva, face,

neck and with extension into the mediastinum as far as the heart, receive the treatments of ten minutes each over a period of fifteen days. All the facial tumor disappeared and the lids could be opened normally. The mediastinum growths were undergoing absorption. In a case of specific choroiditis with stubborn neuralgia, twenty-four hours' application of radium gave complete relief. In a case of extensive traumatic hemorrhage into the vitreous, vision improved from one-tenth to one-third, with a corresponding clearing of the vitreous after twenty-four hours' application. Two cases of retinal detachment and one of parenchymatous keratitis were unimproved.—*The Homoeopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

ADRENALIN IN THE TREATMENT OF GLAUCOMA.—Grandclement states that a majority of cases of glaucoma can be cured without operation. But to obtain this result four conditions are requisite and indispensable:

1. It is necessary that the glaucoma be recent, and that it has not yet had time to produce those incurable organic lesions in iris, ciliary body and irido-corneal angle.

2. It is necessary that the adrenalin be instilled in the eye every half hour without intermission until hypertension disappears. This takes generally about three days.

3. It is necessary to employ eserine in connection with it to combat at the same time the two principal causes of the glaucamatus process; the hypersecretion from the congested ciliary body into the aqueous humour is controlled by the adrenalin, and the defect in elimination by the closure of the spaces of Fontana is controlled by the eserine, which, by bringing the iris forward, disengages these spaces.

4. Finally, it is necessary to stop or lessen the use of the adrenalin as soon as the hypertension has disappeared, otherwise there may supervene an hypotmy of the weakened eye that may be permanent.—*The Homoeopath. Eye, Ear and Throat Journal.*

WILLIAM SPENCER, M. D.

GRAFTING A FROG'S MUCOUS MEMBRANE TO THE HUMAN CONJUNCTIVA.—Dr. Leslie Paton, London, grafted three pieces from the roof of the mouth of a frog to supply conjunctiva in a case of complete adhesion of the lower lid to the eyeball, with diplopia, due to contraction, in every direction. In the dissection of the lid all normal conjunctiva was preserved, and pieces of graft held in place by fine silk sutures at the palpebral margin and on the bulbus, but left free at the lower portion of the cul de sac. Protective tissue was used to keep them in place and the eye bandaged for six days. All grafts took and only at the inner ocular one was there a cicatricial band. Movements of the eye became free without diplopia except at extreme outward turning. The appearance of the eye and conjunctiva is most natural.—*Lancet.*

WILLIAM SPENCER, M. D.

RETROBULBAR NEURITIS.—Dr. St. John Roosa reports a number of cases due to alcohol, tobacco and diabetes treated with hypodermic injections of strychnia. The injection was preferred in the temple, but often made in

the arm, and the dose was gradually increased till it reached one-third of a grain. Nine cases are reported, most of them treated in the hospital, and all under dietetic and general management. One case was cured, six improved after varying lengths of treatment, one was unimproved, and one recorded as cured was not, as it seems to the writer, a case of toxic amblyopia.—*Post Graduate*.

WILLIAM SPENCER, M. D.

TOXIC AMBLYOPIA BY METHYL ALCOHOL.—Dr. Buller reports three cases in which there was rapid failure of sight, occasionally being complete, but returning again for a time, and soon relapsing. The ocular disturbance was usually symmetrical, and both contracted visual fields and central scotomata were observed. Ophthalmoscopically the disk was blurred on its edges, and presented a cloudiness of the retina. An optic neuritis and also a complete atrophy without signs of any antecedent inflammation was manifest in some cases.—*The Homoeopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

THE ETIOLOGY OF KRAUROSIS VULVAE.—This disease, first described by Breisky a few years ago, has been accorded a tardy and by no means universal recognition as a distinct disease. Its etiology has not been clearly defined. In some respects the disease seems to be associated with chronic inflammation. It has not been possible to isolate any micro-organism bearing a casual relation to the disease. Jung was led to examine tissue from the vulva removed for other causes than for kraurosis, and the microscopic picture constantly displayed the same changes, though in lesser degree, as those regarded as characteristic of kraurosis, and this identity suggested the thought that the same processes, but in their beginning stages, might exist; and therefore a closer examination of these initial stages might be expected to furnish a more favorable opportunity for studying the disease in its incipency. The author has examined four cases of chronic vulvitis which neither macroscopically nor clinically presented the conditions found in kraurosis, and yet which on microscopic examination exhibited all the changes recognized as characteristic of kraurosis. These are fully illustrated in his article. He believes himself justified in concluding that histologically there is no qualitative difference between chronic vulvitis and pronounced kraurosis but only a quantitative difference, and no distinction can be made between the two processes except in degree. Kraurosis therefore is to be regarded as a chronic vulvitis, and in fact an end process of that inflammation, and not as an essential disease.—*Zeitschr. f. Geb. u. Gyn.* 52, 13.

THEODORE J. GRAMM, M. D.

OPERATION FOR VESICAL CALCULUS.—*Stoeckel* says four methods of operating are presented: 1. Introduction of the fingers through the dilated urethra; 2. through the cystoscope; 3. *sectio alta*; 4. Colpocystotomy. The first method should be abandoned because of the danger of permanent injury to the sphincter action of the urethra. Operating through the cystoscope requires a too complicated technique and is only applicable to small foreign bodies. He recommends the high operation for the removal

of tumors of the bladder, and favors colpocystotomy when the calculus is large. The operation is performed by making a medium incision of four to six centimeters through the anterior vaginal wall, and pressing the bladder by means of a catheter or sound into the wound, the bladder is opened and the finger introduced into its cavity and the foreign body easily found. Stoeckel has always closed the bladder wound without drainage, using catgut sutures, without having a fistula form. A retention catheter is used.—*Zentralbl. f. Gyn.* 1904-1043.

THEODORE J. GRAMM, M. D.

THE SIGNIFICANCE OF FEVER DURING CHILDBIRTH.—*Ihm* has examined this question as exemplified in 200 patients having elevated temperature arising from causes resident in the generative organs. The subject has been considered from many aspects, and some of the conclusions reached are: 1. The premature and early rupture of the membranes must be regarded as an important etiological factor. 2. The prognosis is but slightly or not at all worse for primiparae as for multiparae; but is more serious for both if operative intervention is required. 3. The duration of the labor after the rupture of the membranes unfavorably affects the prognosis when continued more than three days, and when the fever sets in soon after the rupture of the membranes. 4. The duration of the infection before delivery does not warrant drawing conclusions for the prognosis, although when the fever has continued but an hour or two before delivery the prognosis has been more favorable. 5. The intensity of the infection does, however, affect the prognosis. In this connection, especially dangerous are: Tympania uteri, foul discharge during labor, continued increased frequency of the pulse, and the complications attending placenta praevia. The prognosis is also affected by the seriousness of the intervention required to terminate the labor.

The treatment should be directed to preventing fever during labor. If fever supervenes the labor should be terminated by the least dangerous methods, but preference is to be given to the interests of the mother. If the fever has just set in and dilatation is not sufficient, the treatment should be confined to increasing the labor pains.—*Zeitsch f. Geb. u. Gyn.* 52-30.

THEODORE J. GRAMM, M. D.

THE MALIGNANCY OF CHORIOEPITHELIOMA.—*Littauer* (Leipsic) has contributed an important article on this subject, to which justice cannot possibly be done in an abstract. He reports the case of a 26-year-old woman who six weeks after an abortion presented, briefly stated, all the evidences of chorioepithelioma, and was treated by curettement. Three months later curetted material disclosed no evidence of the disease. In discussing the questions suggested, whether a malignant neoplasm had disappeared or whether the entrance of chorioepithelial elements into the muscle and vessels had no malignant character, the author has assembled a number of noteworthy observations. Thus several published cases are cited in which the microscopic examination disclosed the evidences of the malignant chorial growth, but which disappeared without recurrence after curettement. Cases also are cited which recovered after the removal of the growth from the vagina, and some also who already had a lung affection with bloody

expectoration. That retrograde changes may take place in metastatic deposits in the lung was demonstrated by observation in the post mortem examination of a case; the same processes were also seen in the uterus in another case. This being true, the microscopic diagnosis of a suspicion of a typical chorioepithelioma is not sufficient to warrant hysterectomy in a young woman. In a multipara approaching the climaxis such a diagnosis might warrant the operation. Unfortunately there are no distinctive signs which serve to differentiate benign from malignant proliferations, and it is therefore also possible to err on the side of conservatism. Cases illustrating this fact are referred to. Under the circumstances the author thinks that in doubtful cases the histological diagnosis must not alone be relied upon, but the age of the patient is to be considered and the clinical course pursued by the case. Marchand has pointed out that there is no absolute malignancy, and that a healthy organism within certain limits is competent to cope with the progress of proliferations of heterogeneous elements.—*Arch. f. Gyn.* Vol. 72-294.

THEODORE J. GRAMM, M. D.

CLOSURE OF THE ABDOMINAL WOUND.—*Stoeckel* addressed a circular letter to a number of German surgeons and gynecologists respecting the method employed in closing the abdominal wound, and received sixty-three replies. The adherents of suture en masse included the names of Hegar, Czerney, Leopold, Freund, Braun, and Trendelenburg. Separate fascial suture is thought by *Kossmann* and *V. Herff* to be incorrect, and others regard it as superfluous. A combination of these, *i. e.*, layer suture with tension suture, is preferred by *Landau*, *Sänger*, *Schede*, *Krönig*, *Menge*, *Döderlein*, *Grater*, *Zweifel*, *Martin*, *Hoffmeier*, and others. *Stoeckel* is opposed to every variety of suture passing through the entire abdominal wall, since they invert the walls toward the peritoneal cavity so that the edges of the incision of the lower sheath of the recti and both recti are wrinkled. In proof of this he exhibited a number of drawings, and also a cross section of a wound closed by suture en masse. From his experience he believes that the best method of suture is the following: 1. Continuous suture of the peritoneum. 2. Two or three loose interrupted sutures for uniting the rectus. 3. Separate fascial sutures (two or three silk worm gut sutures in the middle and at both ends of the incision, and between them continuous catgut.) 4. Silk worm gut interrupted sutures through the skin and subcutaneous fat. He removes the stitches on the twelfth or fourteenth day. The extra median linear incision of *Lenander*, or through the rectus is best. The transverse suprapubic incision of *Pfannenstiël* has also served well.—*Zentralbl. f. Gyn.* 1904-35-1050.

THEODORE J. GRAMM, M. D.

PATHOLOGICAL CHARACTERS, DIAGNOSIS AND EPIDEMIOLOGY OF BUBONIC PLAGUE.—*M. J. White*, who has studied plague among white persons, Asiatics, animals and insects, in California, Honolulu, and Hongkong, gives an extensive and very detailed discussion of all features of the disease. Three clinical varieties are recognized and may be defined pathologically as follows: 1. The bubonic or lymphadenal variety. This is a regional lymphadenal or "typic Bubo," characterized as anatomically by a chain of

hemorrhagiconecrotic nodes embedded in serohemorrhagic edema. 2. The pneumonic variety. This occurs as a lobar or lobular consolidation essentially indistinguishable, histologically, from pneumococcal and other bacterial pneumonias. 3. The septicemic variety, which is a bacillemia without the association of pneumonia, lymphadenitis or other gross lesions resulting from bacterial activity. The face and tongue are valuable diagnostic aids, the facial expression being characterized by great anxiety and congested conjunctivas, while the tongue is at first pearly white-coated and soon becomes covered with a thick, very moist mahogany-brown coating, most marked along the center posteriorly. The borders are pale-red and the organ is somewhat swollen. The early coexistence of such facies and tongue, especially when the severity of the attack is marked, is almost pathognomonic, particularly if there are severe headaches. The bacteriology of *B. pestis* is treated at length and it is stated that the examination of the faeces affords a good chance for early diagnosis and should be made in every case. The most troublesome associates of the pest bacillus are the colon group organisms, and these may best be filtered out of the cultures by cutaneous inoculation of a guineapig. Postmortem cultures from the spleen or heart's blood will usually be free from contaminating organisms. In considering the epidemiology of the disease the author points out that suctorila insects do not by biting inoculate bacteria, and that plague rats are dangerous, chiefly by distributing their deject about the food and habitations of a man, and not through their faeces. Scavenger insects have abundant facilities both for acquiring and distributing the infection, and the author believes that for the eradication of plague it is necessary to kill these insects, as well as rats, by shutting them off from human habitations, food sources, their breeding places and haunts, by screening doors, and windows, closing cracks and holes in markets, houses, and stables, etc., prompt removal of all garbage, refuse, etc., and attention to the marketing of sea-foods from waters likely to be contaminated with infected sewage.—*Medical Record*, January 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.,

with the collaboration in German literature of Oscar Boericke, M. D.,
and in French literature of Charles Platt, M. D.

PNEUMONIA COMPLICATING INJURIES IN ALCOHOLICS.—It ought to furnish convincing arguments for the temperance cause that fractures and other injuries, when occurring in habitual drinkers, are so frequently followed by fatal pneumonia. It must be the experience of all surgeons that an unexpected pneumonia frequently follows severe injury, in such subjects. They seem to be particularly susceptible to this infection. Again we must remember the possibility of pneumonia originating from traumatism of the chest. Indeed it is sometimes observed that a right-sided pneumonia follows injury to the left chest wall, and *vice-versa*. Pneumonia may follow an injury within 48 hours, or may occur later. Again, it is common for such a pneumonia to be marked by a delirium very suggestive of delirium tremens; or true mania-a-potu may be present; especially if the injured one has been denied his accustomed daily quota of alcohol. In the treatment of such pneumonia as those of which we are speaking, there is no remedial agent that compares in efficiency with liberal doses of spirit. Most of such cases die, but, if any can be saved, they will, we believe, be saved by alcohol. The condition is not one that may be considered favorable for “swearing-off” measures. It has occurred to us that the surgeon might well consider the propriety, in such cases, of continuing the daily quota of alcohol subsequent to the injury, and that, perhaps, this procedure might help to prevent subsequent pneumonia and delirium tremens.

SANGUINARIN NITRATE IN NASAL POLYPI.—Dr. Charles Hubbard relates a case of nasal polypi in which, owing to a marked deviation of the septum, it was impossible to use the snare successfully. *Sanguinarin nitrate*, third decimal, was ordered internally; and snuffed up the nose locally. After a few weeks, great improvement was noted; and, up to the present time, the growths have not recurred.—(*Hom. E. E. & T. Journal*.)

SULPHUR IN DISPERSION OF CHALAZIA OF RECENT FORMATION.—Chalazion on the inner portion of the left upper lid, without inflammatory symptoms, gradually disappeared, within three weeks, under the use of Sulphur 12x., taken morning and evening. The tumors yielding to this remedy are recent, mostly not over one month's growth. None have suppurated, nor

was there any destructive process noticed.—(G. A. Suffa, M. D., in *E. E. & T. Journal*.)

YELLOW SULPHURET OF MERCURY IN CROUP.—I have never yet found a remedy which will so invariably and promptly relieve the various forms of croup as the yellow sulphuret of mercury. I have usually given it in one grain doses of the first trituration, commencing as soon as the metallic cough is observed and repeating it from every half-hour to every two hours, according to the violence of the symptoms. After the urgency of the attack has been sufficiently mitigated, I resort to *Spongia*, *Hepar* and the other remedies of our school, as these may be indicated.—(*The American Physician*.) (Turpeth Mineral is not a new remedy for croup, it was Hering, perhaps, who first proved it and introduced it into homœopathic practice. In the old Dispensatory of fifty years ago, we may find it strongly recommended in the treatment of croup.)

COLICA MUCOSA OR PSEUDO-MEMBRANOUS ENTERO-COLITIS, THE REMEDIES MOST USEFUL.—Dr. A. Speirs-Alexander's article read before the British Homœopathic Society, and reprinted in *American Physician*, contains the following excellent indications for the use of remedies in this troublesome affection:

Graphites.—The pathogenesis of the remedy corresponds closely with the intestinal symptoms of the disease. Its stools are hard, lumpy, glued together by sticky slime; accompanied by discharges of mucus in shreds. The bowels are inactive, and there may be a sense of weight and uneasiness in the abdomen. Other symptoms which might confirm its selection are: Dry or glutinous skin eruptions, delayed menses, induration of the ovaries; and in the mental sphere, or nervous spheres, anxiety, apprehensiveness and depression of spirits. A case is mentioned in which *Graphites* 12th. dilution, with high injections of normal saline solution in the morning, and an injection medicated with *Hydrastis* tincture at bedtime, seemed to be curative. The diet was a very liberal one.

Colchicum, comes next in order of merit.—The motions induced by this drug are, for the most part, diarrhetic; although, in some instances, there is constipation, with ineffectual urging to stool, and a sensation of fæces in the rectum which cannot be expelled. An important feature of the pathogenesis of this remedy is that masses of plastic exudation, having the appearance of partly solidified mucous, are frequently expelled from the rectum. Hence this remedy might be useful in those cases in which diarrhœa prevails, and more particularly so, if the patient be also the subject of those gouty and rheumatic symptoms which are so characteristic of *colchicum*.

Hydrastis.—It might be doubted whether *hydrastis* suits the neurotic conditions so often found in this disease. It is indicated, however, in chronic constipation associated with colicky pain, where the fæces are in the form of hard balls coated over with a yellowish, tough mucus; or, where constipation alternates with the discharge of membranous casts. Should we have the gastric or hepatic derangements, or pelvic disorders such as cervical erosions, metrorrhagia, or yellowish leucorrhœa; these would furnish additional indications for *hydrastis*.

THE SALTS OF BARIUM.—Dr. W. A. Dewey, in *The University Homœopathic Observer*, says that the pathological condition indicating *Baryta* as a homœopathic remedy, is *hypertrophy of the connective tissue*. We have hypertrophy of tonsils, prostate gland, testicles, ovaries, thyroid gland, mesenteric glands and mammary glands; all of which pathological states come within the curative range of this remedy. This suggestion should be of interest to our neurologists, for the reason that *Baryta* may be a possible remedy in such conditions as locomotor ataxia. Dr. Hammond recommends it in sclerosis of the posterior columns, the morbid anatomy of which includes hypertrophy of connective tissue with atrophy of cells. Atrophy of nerve substance is the necessary result of such a condition as hypertrophy of connective tissue in such conditions. Hahnemann long ago pointed out the fact that many of the *symptoms* of *Baryta* resembled those of cerebral and spinal atrophy, such as diseases of old age, imbecility, paralysis, loss of co-ordination of motions and so on. *Baryta* is often indicated in *acute tonsillitis*. It should be used in the 12th. dilution. There are stitching and smarting pains in the glands, the patient takes cold easily and there is then a tendency towards suppuration in the tonsils. The pains are worse upon empty swallowing. Frequently there will be found associated, a chronic nasal catarrh with abundant discharge of thick, yellow mucus and a dry feeling every time the nose is blown. In chronic hypertrophy of the tonsils, *Baryta* is less frequently called for and will fail unless due attention is paid to the constitution and temperament of the patient. These latter must correspond to the *Baryta*, or failure will follow its administration here. The *Baryta* seems to be particularly useful for *fatty tumors*. Dr. Hoyne uses the 200 dilution, and says that this preparation will cure these tumors in many instances. He challenges a trial of it in fatty tumors. Dr. E. C. Price has written that *Baryta* 30th. and 200th. has cured fibroid tumors upon the eyelids very often. Occasionally this observer has had to interpolate *Silica* or *Kali carbonicum* in order to complete the cure. *Baryta* is always a most useful remedy for the degenerative changes as these occur in arteries. In arterio-sclerosis, aneurisms, apoplexy due to senility and so on, it should be thought of.

THE HAHNEMANNIAN AS A SPECIALIST.—Stuart Close, M. D., in *The Medical Advance*, has written an admirable paper. In this paper, which is upon the topic, "The Hahnemannian as a Specialist," he makes the statement that the designation "homœopathic physician" has lost much of its original significance. So many, professing to practice homœopathy, show by their failures to cure as well as by their public utterances and their facile resort to allopathic expedients, that they are ignorant of the real principles and methods of homœopathy. The existence of such things, the author believes, is partly due to the inherent weakness of human nature, and partly to our national inheritance; for it has been asserted that the American intellect is very agile rather than very profound. It plays lightly, sometimes brilliantly, over the surface of things, but does not penetrate them to any great depth. In this way he explains that the profession have come to neglect the study of homœopathic philosophy and *The Organon* and *The Chronic Diseases*; as well as the works of such of our old masters as Hahnemann, Dunham, Bonninghausen, Lippe and others. This is, to us, a new explana-

tion of the superficiality of some. The author believes in being liberal in a sensible way. He believes that the best way to demonstrate the truth, and advance the cause of homœopathy is to heal the sick; hence to thoroughly master the principles and perfect the technique of homœopathic prescribing seems to be what we ought to devote most attention to. He believes such to be the basis of the only "recognition" that is worth having. The Hahnemannian Specialist, then, is a specialist in therapeutics; an expert in *materia medica*. The first duty of such a specialist is to recognize and clearly define his sphere of operation. In order to do this, he must be able to recognize and exclude what does not come within the scope of his special art. He must clearly perceive what is to be cured in diseases, he must know what is curative in each medicine, and how to adapt it to the needs of the individual case; he must know the obstacles to recovery in each case and how to remove these. This latter he may do by calling to his aid the allied sciences of surgery, hygiene and pathology. The honor and success of Homœopathy are best upheld by a timely recognition of its true limitations. We must not take a narrow view of this matter, but when the homœopathic physician comes to regard himself as a specialist in therapeutics, learns his limitations, and systematically qualifies himself by perfecting his technique, as other specialists do, he will do better work and save himself from mortifying failures. We like to see these liberal views expressed by journals like the *Advance*. The Hahnemannians are more liberal in their views than they used to be. They still criticise the faulty technique and the superficiality of modern homœopathic prescribers; and we hope they will keep on criticising along these lines.

ARTHRITIS DEFORMANS.—In this crux for patients and physicians, Dr. Bonino has found the best results from a weekly alternation of *Cauticum* and *Thuja*.

DPHTHERIA.—Charles Curtis, M. D., in *Homœopathic Recorder*, thinks that he has obtained his best results in the treatment of this dread disease, with the two remedies, *Mercurius cyanatus* and *Baptisia*; give alternately. He prescribes the former in the fourth or sixth potency and the latter in the tincture. This writer also uses alcohol in large and frequent doses.

REMEDIES USEFUL IN MENORRHAGIA.—F. H. Bodman, M. D., in *Monthly Homœopathic Review*, expresses the opinion that a large majority of cases of menorrhagia will be relieved by one of the following remedies: *Sabina*, *crocus*, *ipëcac*, *hamamelis*, *trillium* or *erigeron canadensis*. He differentiates these remedies in the following manner:

Sabina.—Plethoric women, who menstruate early and profusely. The discharge is bright red in color, fluid or mixed with clots, aggravated by the least exertion, accompanied by drawing pains from back to pubes, or with abdominal spasms. *Sabina* should be used in the dilutions from 2x. to 6x.

Crocus Sativa.—The discharge consists of dark, stringy, viscid blood, with black clots, aggravated by motion and accompanied by faintness or palpitation, and sometimes by a feeling of rolling in the abdomen. This remedy is particularly useful in young women suffering from functional menorrhagia, and in cases of passive congestion of the uterus.

Ipecacuanha.—A profuse, continuous or gushing flow of bright red

blood, accompanied by nausea, chilliness, faintness or symptoms of dyspepsia.

Hamamelis.—Dark, venous blood, without uterine pains, flowing chiefly during the day, accompanied by varicosis or portal congestion, or with a hammering headache.

Trilium Pend.—If the menses come on too frequently, last too long, with profuse discharge which is at first bright red, afterwards becoming dark or pale; aggravated by movement and accompanied by feeling of constriction in the veins. For active uterine hemorrhages due to fibroids, this is a very useful drug. Active, profuse, bright red flow, associated with symptoms indicative of irritation of rectum and bladder, require the oil of erigeron which may be given in the first decimal in gelatine capsules.

HEADACHE, PHOSPHORIC ACID.—*The Hom. E. E. and Throat Journal* says that the headaches of school children dependent upon over use of the eyes are frequently amenable to phosphoric acid.

AN ABSOLUTELY SAFE METHOD OF LANCING TONSILAR OR PERITONSILAR ABSCESES.—L. C. McElwee, M. D., in *Clinical Reporter*, recommends the physician to administer an anaesthetic to the sufferer from tonsilar abscess, and then, after introducing a suitable and efficient mouth gag, to make a slight incision through the mucus membrane over the point of fluctuation. Having made such an incision, the bistoury is to be discarded for a grooved director or a probe pointed bistoury. Either of these is inserted into the incision and pushed through the connective tissue into the pus cavity. The result is announced by a gush of pus. Into the tract is then inserted either a blunt pointed scissors or an artery forceps, and the opening is made large enough to permit of free drainage. After the consciousness has returned, the patient may gargle the throat with some antiseptic solution.

DIET IN CARDIAC AFFECTIONS.—In the treatment of any form of cardiac disease, we must keep in mind the importance of regulating the amount and character of the food taken by our patient, if we would be successful. In cases of hypertrophy, the diet should be sufficiently nutritious to keep the heart muscle well nourished, yet it must not overtax the digestive organs or it will aggravate. In fatty heart or in fatty degeneration of the heart, the diet should not contain the carbohydrates to any extent, and the patient should be restricted as regards amount of water or liquids taken. Irregular heart action sometimes yields to dieting without medicine, the trouble often being largely in the stomach or bowels; so also it is with rapid heart, slow heart and palpitations. Consider well the state of the digestion, stomach and bowels before beginning heart medicines.—(*Exchange*.)

DRUG TREATMENTS IN THE LATER STAGES OF PHTHISIS.—Theophilus Ord, M. R. C. S., speaks favorably of the action of five drop doses of tincture (lx.) of *iodine*, given in milk. *Iodine of aurum*, in two-grain doses of the 2x. trit. is a remedy which will sometimes start remedial processes in cases that are apparently hopeless. But, of all the remedies at our command, the author thinks best of the *iodide of stannum*, 2x. trituration, in one to three-grain doses, after meals. With this latter remedy, the author has

had many gratifying successes in the later stages of phthisis. If gastric irritation is produced by the 2x., he substitutes the 3x. Should no good effects be noted after one week's use of the stannum iodide, he gives the 1x. of iodine. The latter remedy then seems to start and supplement the action of the stannum in a marked degree.—*Journal British Homœopathic Society.*

WHAT THE STUDENT SHOULD BE TAUGHT.—Responding to the toast "The Homœopathic Instructor," Dr. James C. Wood said that he would like to see the medical student broad, liberal, receptive and sincere. We should teach the student that Homœopathy affords a very practical guide in the treatment of disease, that Homœopathy aims at the eradication of disease, whenever that is possible, rather than merely to afford palliative relief; that Homœopathy economizes the vital powers by administering the minimum curative dose; that the homœopathic physician first learns the properties of drugs by experimenting upon the healthy rather than upon the sick; and is, therefore, better prepared to treat any new form of disease which may present itself, than is the so-called "regular" physician, for the reason that he bases his treatment upon the phenomena of disease rather than upon its essence, and deals with such phenomena inductively rather than deductively. But besides these things the student should be taught the *limits* of homœopathic law, so that he may not make himself ridiculous by applying the law to conditions which are not amenable to it. The student should be taught that the law of similars relates to no agents intended to affect the organism chemically or mechanically; that it relates to none required for the development or support of the organism when in health; that it relates to none employed directly to remove or to destroy parasites which infest or prey upon the human body; that it relates to none which act in a purely eliminative way to rid the system of poisons and ptomaines; that it relates to none which act in a purely stimulative way. The author thinks that such an explanation will disarm criticism and extend the usefulness of Homœopathy. That it places the law of similars in its legitimate sphere of action, and leaves the physician free to utilize all methods of cure or relief which will best subserve the interests of the patient.—(*Hom. Observer.*) Well, is not this the way we teach our students? Or do we teach Homœopathy, with the accent upon its *limitations*; for the graduate of to-day, is great on limitations, and so liberal that he will sometimes even give away his Homœopathy for something not as good.

BARYTA CARBONICA FOR SPAVIN IN HORSES AND LAMENESS IN DOGS.—Edward Mahony relates the case of a valuable dachshund, who suffered from lameness in the hind legs. There was aggravation from dampness and the joints were much swollen. The animal was weak and had to be carried. Rhus tox. failed. Remembering the statement of the late Dr. Hering that Baryta carb. was useful in lame and spavined horses, the author gave this dog six doses of *Baryta carb.* 30., one night and morning. The prompt cure that followed, suggests anew the value of this remedy in veterinary practice.—*Hom. World.*

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HAHNEMANN'S PLACE IN HISTORY.

BY I. W. HEYSINGER, A. M., M. D., PHILADELPHIA, PA.

Nearly forty years have passed away since the last gun was fired in our own great War of the Rebellion, and, as yet, the true history of that war has never been written. Passion and prejudice, conclusions based on what we now know to have been false evidence, paid newspaper criticisms, and political frauds and trickery, which now seem so mean and little to us, have so warped and beclouded the true facts, as to have dwarfed the reality and falsified the perspective, until the history of that war and those who conducted it as leaders, who fought it as soldiers, or who controlled it for weal or woe as politicians and statesmen, we now know, will appear far different from what it has hitherto appeared, and their place in history will be far different from what has been yet suspected, when the great common public consent (of students and experts who have surveyed the whole field) shall have come and calmly formed its final judgment.

The time is not here yet, but it is rapidly approaching; it is nearly here. Events appear to transpire and pass away, leaving but a memory behind them; but it is not so. It has been said that every human thought leaves an imperishable and fixed record behind it which, thousands of years hence, could be brought forth and so prove its data with a precision and accuracy which no false testimony could overthrow, and

no ignorance could dispute. So the passing events of a great war, by their very recording in the secret words and writings, the orders and reports of those who brought the events about, are thus so fixed and established, that when the proper time has come they will fall into harmonious relationship with each other, from General to Colonel, commander and subaltern, friend and enemy, that the whole panorama will come forth with a clearness and brilliancy, a force of conviction and certainty, which no one could have believed possible; and in that day woe to those factitious reputations, and bolstered personal fortunes of the moment; woe to the mean partisanship and low political scheming of the cabinet; woe to the paid lies and paid liars, the prejudice, the well-meant bigotry, and the low intentions based on chicane and fraud, or weakness and narrowness—all these will be stripped naked, and will stand forth in their own disgusting deformity, and the true heroes will step forth triumphantly, to take their lofty places which time nor change will ever again alter or efface.

For three-quarters of a century the whole career of Napoleon Bonaparte was misunderstood, and his genius and powers made the shuttle-cock of contemporary weaklings and conspirators. Only within the past two decades has it been even possible for the public, (that great jury which must sit on every reputation at last, and whose cold judgment will be final and irreversible), to obtain a true view and just perspective of that, in many respects, almost unapproachable human being, whose humanity even, (double-sided, or many-sided, as humanity always is, in its higher aspects), seems on one hand to cling to the earthy and on the other to find its powers only in the superhuman; it has taken all these seventy years and more to learn what he was, and what he accomplished, of which his own personal career in France was but an insignificant part.

Centuries were required to enable the world to obtain a fair and unbiased view of Cromwell, or of Luther, or of Julius Cæsar, of Hannibal, even of Alexander the Great, and the old heroic forms which rise out of the lands of Egypt and Babylon are even now only emerging clearly from the mists of doubt and misconception. Herodotus for centuries was stigmatized as "the prince of liars;" we know now that he was the prince of truth-tellers, and the actual father of history. Moses, for centuries, was misunderstood, as well as his mission. Buddha,

Mahomet, even Christ, are slowly emerging into that calm light which rests eternal in the valhalla of our northern and cold-blooded race; and we must be careful not to be misled by idolatry on the one hand, or cheap bigotry and hatred on the other, that double-headed monster which would take and hug some dear illusion to its breast, because it claimed it as its own, with all its putrescence and deformity, or spurn and crucify some living truth because it knew it not and loved it not, and was too narrow and ignorant, too little and bigoted, to learn.

Great men of a certain type may be said to never die, not even on earth. A great mind, and a high courage, and a powerful executive ability, when they are controlled, not by the present and the merely conscious, but by the great psychical powers of a richly-stored sub-consciousness, drawing its supplies largely, beyond doubt, from a fountain which never fails, and an ocean whose tides never ebb, will start a movement which the poor, short span of our own human lives on earth, could never hope to achieve. A living movement will continue to live and to grow in strength and energy long after its initiative human engine has ceased to pulsate, and its lifeless members have fallen into dust and decay. Nay, a great movement, backed by truth and timeliness, will not even begin to show its true power and scope until the human instrument, which touched the strings, and woke undying harmonies, has left the harp in other hands and gone to its reward.

It is well that this is so; well for the man, well for mankind; and well also for the great truth which is about to go forth and conquer.

For in every such initiative the earthly personality is the material machine which handles and drives forth these great conceptions; and great truths, so presented, amid the surge and sweep and roar of battle, will shrink at the sight of so much blood, or falter beneath the pain of wounds, or else rise in personal wrath against hatred and abuse, so that the great calm purpose, the great vital principle, and even the movement itself will show the marks of mortal strife, and be disfigured by the human imperfections and impressions received amid the blows of the conflict.

But new hands take up the weapons, new frames bear the armor, and the war goes on, under the same old battle-flag, and with the same old battle-cry, and finally there will come

the great day of triumph, in which all questions will be gone over, treaties of peace made, the conquered territory will be recognized, and the true place of all who took part in the great warfare will be allotted, and that settlement will be final and irrevocable.

Moses never entered the promised land; Alexander died young before his conquests could be even catalogued; Cæsar fell by the blade of the assassin before success had even touched his brow; Christ left but a feeble band of peasants behind Him; Mahomet died before his hosts had yet swept away the darkness of ignorance and idolatry over its three continents; Napoleon lost his throne and place at Waterloo and died in exile.

But the great movements initiated and driven forward by these mighty heroes continued and spread, and the whole world was successively reconstructed and rearranged for the future of mankind and its progress. The bud and the fruit did not germinate together, but each is after its kind.

It is not my purpose to examine in detail the work of Samuel Hahnemann, nor to devote time to the consideration of his theories aside from his achievements. I shall endeavor to briefly depict the background against which he is presented on the pages of history; to show the long-established and almost sacred tyranny of darkness and ignorance which claimed the medical profession when he entered the arena, like David when he faced the Philistines on that fateful day which was to determine the whole future of the Semitic race and of our own, to indicate briefly how our whole modern science was a totally sealed book at that day, and point out that to compare Hahnemann's work, item by item, with the medical art and science of to-day would be as irrational as to cite the pioneer who opened up a new country, against the same country when populated by millions, or to pillory Columbus as grossly ignorant of steamships and railroads, not to speak of wireless telegraphy, which would have done so much for his ships, or of a knowledge of aboriginal American languages, which would have so aided his land discoveries. It is an axiom of law that the first inventor, who makes an invention, reduces it to practice and makes it public to the world, shall be entitled to the full fruits of his inventive genius, and shall be protected therein against all new-comers, who are the improvers, the adapters, the constructors, and, in a limited degree, inventors, perhaps, but not the "first and sole inventors," not the great original in-

ventors, in fact, to whom the whole unending series was due, and with whose initiative it began.

Carrying the mind back from Hahnemann, it will not rest or halt on a similar genius in medicine until it touches the majestic form of Hippocrates, buried in the depths of twenty-four centuries, nor even then. In order that we may fix somewhat Hahnemann's place in history, it will be necessary to cite the facts upon which depends the place of Hippocrates in history, for we shall find, as we study these two characters, a strange parallelism in methods and results, and against a background of like dark ages in the science and practice of medicine. In the day of Hippocrates medicine had not yet emerged from the world-darkness of superstition and empiricism; at the time of Hahnemann's advent it had, for long centuries, reverted to this darkness, which, under the aegis of Galen and the accredited teachers and followers of medicine during the dark middle ages, had again taken on new sanctity, so that, as it has been said, "Medicine claimed far more victims during those ensanguined centuries than all the death and carnage of war."

Hippocrates, "the Father of Medicine," was born 460 years before the Christian era; he was a member of the family of the Esclepidæ, perhaps the nineteenth in direct descent from Aesculapius. He studied medicine under Heraclides, his father, and Herodicus; in philosophy his masters were Gorgias and Democritus. His earlier studies were pursued in the famous Asclepion of Cos, and also at Cnidos. He travelled extensively and taught medicine and practiced his profession at Athens, in Thrace, Thessaly, Delos, and in his native island, Cos. He died when about a hundred years old, at Larissa, in Thessaly, and left volumes of his writings which are still the resort and inspiration of the medical profession of this day. A distinguished writer says of the Father of Medicine, "How strongly his mind revolted against the use of charms, amulets, incantations, and such devices, appears from his writings; and he has expressly recorded, as underlying all his practice, the conviction that however disease may be regarded from the religious point of view, they must all be scientifically treated as subject to natural laws. Nor was he anxious to maintain the connection between philosophy and medicine which had for long existed in a confused and confusing fashion. Hippocrates based his principles and practice on the theory of the

existence of a spiritual restoring essence or principle, "Physis," the "*vis medicatrix naturae*," in the management of which the art of the physician consisted. This art could, he held, be only obtained by the application of experience, not only to diseases at large, but to diseases in the individual. He strongly deprecated blind empiricism. Holding firmly to his principle, he did not allow himself to remain inactive in the presence of disease; he was not a merely "expectant" physician; as Sydenham puts it, his practice was "the support of enfeebled and the coercion of outraged nature." Laennec, to whom we are indebted for the practice of auscultation, freely admits that the idea was suggested to him by study of Hippocrates. The power of graphic description of phenomena in the Hippocratic writings is illustrated by the retention of the term "*facies Hippocratica*," applied to the appearance of a moribund person pictured in the *Prognostics*. The name "Hippocratic succussion" is still retained, as well as the practice, in modern diagnosis.

Adams states the general estimate of commentators in the following words: "The peculiar style and method of Hippocrates are held to be conciseness of expression, great condensation of matter, and disposition to regard all professional subjects in a practical point of view, to eschew subtle hypotheses and modes of treatment based on vague abstractions."

These were the characteristics of Hahnemann in a super-eminent degree. He held that all diseases are subject to natural laws; that they must be treated scientifically, instead of empirically; he complained bitterly that medicine as taught in his day was a mass of theories and hypotheses, that a false philosophy had usurped the place of clinical experience, and that the whole practice was irrational and confusing. Hahnemann claimed and demonstrated tactically the existence of a spiritual or dynamic factor, a restoring power or principle, which in disease is disturbed and thrown out of control, and which it is the place of medicine to restore, when the processes of health will again replace those of discoördination, which constitutes disease. He held that this art could only be acquired by bedside experience, by practical experimentation with drugs on the living person, and that disease must be individualized in the individual, and not covered by misleading class names, which, bad enough in this day of scientific advances in pathology and physiology, were totally worthless

and misleading in those days when such sciences had not even begun to exist. Blind empiricism was the enemy which Hahnemann met and fought, first, last and all the time.

Yet not forty years ago empiricism was the sole teaching in all the regularly appointed schools of medicine in the world, and it is still the faith and practice of a majority of the physicians—tempered, however, by that inner faith which bedside practice for years and years, must give to every sympathetic and observing physician, but for long utterly heterodox and heretical with all the medical schools.

Hahnemann's writings, when they come to be read and studied by all physicians, as they are destined to be, will be found to be marvelous in their simplicity and beauty, concise almost beyond comparison, direct and unequivocal all the time, eschewing subtle hypothesis, and as practical as the teachings of a horse-shoer. As a literary monument of scientific labor, perhaps his *Materia Medica Pura*, and *Chronic Diseases* have never been surpassed; they are gold mines which pan out solid nuggets on every page, and they are all his own, for he made them, he created them, as it were, out of nothing, except that mighty mentality which saw with a sight that was startling in its searching and far-sightedness, and out of the shapeless and meaningless ruins of a submerged past, and the hard, ceaseless, day-and-night toil of a sane mind in a sound body.

A critic says of him, "Hahnemann was a man of remarkable perseverance and courage. He not only sacrificed his immediate interests for the sake of his convictions, but made many painful experiments upon his own person."

What was that dark background of "Medical Art and Science" against which was projected the historic figure of Hahnemann? This great reformer and constructor was born in the year 1755, just a century and a half ago. Seventy-five years before this date (for medical art had drifted rudderless and without a pilot during those long, dark, antecedent centuries), was published in France and republished in English, (endorsed by the French Academy, the Faculty of Physick in the University of Paris, and sent forth with the following endorsement of the Dean and doctors), the great work of Charras, "The Royal Pharmacopœa Galenical and Chymical." Here is the endorsement:

"That it contains all the marrow of the Ancients, and the best of what has been discovered in later Ages," and that "It

will be very necessary for all those persons that give their minds to the study and exercise of Physick."

It bears also the high endorsement of Fagon, Counsellor to the King, Physician in Ordinary to the Queen, and Professor in Pharmacy at the Garden Royal, as follows:

"They who shall read this may spare themselves the pains of reading any other."

I wish that I could quote *in extenso* from this massive volume, so rich in philosophy, so poor in science; so clear in direction, and so confused in application, so learned in the gathered lore of the ancients, and the picked-up concoctions of the moderns; so valuable to the medical archæologist, and so worthless to medical art and science of any sect or school to-day; and which claimed but a few decades before Hahnemann, that they who used this great work as a guide and counsellor in medicine, might spare themselves the pains of using or reading any other.

We shall find plenty of theories, but no principles; plenty of hypotheses, but no demonstrations; plenty of superstitions, but no *rationale*; plenty of practice, but no science or true art. The whole field is covered with brambles and jungle, and all around it is the towering deep forest which no explorer had sought to penetrate, and into whose unknown depths no scientific pioneer had even blazed a single pathway.

In the chapter on "the Virtue of Medicaments" we read: "There are three sorts of Virtues attributed to medicament. The first sort, which by the ancients was esteemed elementary, only ought to be attributed to the principles whereof it is composed; that it, that it heats, cools, moistens, and dries; and still to follow their opinion, sometimes obscurely in the first degree, sometimes manifestly in the second, sometimes violently in the third, and sometimes to extremity in the fourth. They also give to each degree a beginning, a middle and an end, which denotes the diminution or excess of heat, cold, moistness, or dryness."

"The second qualities are the products of the first. For the property of heat is to open, rarefie, attenuate, attract, &c. The property of cold is to thicken, to condense, to stop, to repell, &c. The property of moist is to moisten, mollifie, &c. The property of dryness is to knit, harden and dissipate humidities, &c.

"The third qualities are hidden, and we can only find them

out by experience. As when a Jasper apply'd to a wound stops the blood; when a toad dry'd, being held in the hand, stopped bleeding at the nose, and assuages the toothache, which is also performed by the bone in the foreleg of the same toad; when a stick of ash, boyl'd under a certain constellation, stops all losses of blood; when a hazle-stick, gathered in its proper season, heals all contusions; when the eagle stone hung about the neck, hinders abortion; and hastens and facilitates the birth, being tied to the thigh; as when a straw cleaves of itself to amber, or Spanish wax, iron to the loadstone; as when certain plants ty'd to a horse's tayl, heal the farcé, and several other effects of the same nature, of which philosophers labor to give the natural reason."

In the choice of medicines certain so-called principles are to be followed: "It is necessary to examine the lightness of medicaments that purge, by attraction, as Agaric, Colloquintida, Scammonie, and Mechoacan; yet this rule admits of some exception. For Jalap, Hermodactiles, and Turbinth, are accounted more rosinny and best, when being dry they feel a little weighty."

"Tis necessary to examine the weight of Medicaments that purge by compression, mollifying and lenifying, as Rhubarb, Cassia, Mirobalans and Tamarins."

"The soft and smooth superficies of a Medicament, is to be preferred before the hard and rougher, Remedies moderately hot, are to be preferred before cold; moist before dry. Hot and moist excel cold and dry. 'Tis also necessary to choose good Scents, and to avoid bad ones; and to act quite contrary in some Hysteric distempers of Women, who cannot endure the scent of sweet odours, which are only then to be employ'd in the lower parts."

The learned author does not describe or insist upon the use of all those compounded Remedies "which the Ancients have made use of; and of which they have left several presidents. It will be enough," he says, "to speak of those which are in practice at this day. To which intent I will divide all compounded Remedies into internal and external. The internal," he continues, "are Juleps, Apozens, Emulsions, Almond milks and creams, Restoratives, Purgative potions, Altering Physick, Mixtures, Gargarasins, Ptisans, divers Decoctions, Bolus's, Clysters, Suppositories, Pessaries, Injections, Wines, Vinegars, and divers Juices, which may be also outwardly ap-

plied, Robbes, Honeys compounded, Oxymels, Syrups, Loches, Lozenges, Condites, Gellies, Conserves, Electuaries, Hiera's, Opiates, Confections, Antidotes, Tablets, Pills, Powders, Distill'd-waters, simple and compound, Feces, Extracts, Rosins, Salts fixt, Volatile and essential, Chystals, Flowers, Magisteries, Saffrons, Oyls, distilled and pressed, Tinctures, Elixirs, Essences, Balsams, Panacea's, Lime, stones, glasses, Regulus's, Sulphurs, Sublimates, Precipitates, &c."

"Remedies external compounded are Baths, Half-baths, as well liquid as by steam, Lotions, Embrocations, Fomentations, Bags and Caps quilted with Cephtalic-powders, Frontlets, Sinapisims, Vesicatories, Depilatories, or Medicines to take away the Hair, Cataplasms, Epithemes liquid and solid, Sulfumigations, Pomatums, Grains and Sweet Candles, Caustic-Stones, Mucilages, several Balsams, several Oyls, as well by infusion as expression and distillation, Liniments, Oyntments, Sear-cloths, Emplasters, Pastes for the Hands, Wax'd-linen cloths, Sparadrops, or Linnen-cloths dipt in melted-salves, certain flowers, certain magisteries, certain Limes, and certain compos'd stones, of all which I shall speak in their proper place."

Hahnemann was bewildered and stunned by all this; recognizing as he did the "Physis," the great basic principle of Hippocrates, nay, establishing it, by a long series of most difficult scientific experiments, in a way and with a force undreamed of by Hippocrates, he showed that living nature always possessed, and was ready to use an internal power to "establish and maintain the system of health again, in sickness," and that to learn how to awaken this reserve power of nature in any case, it was necessary to know precisely what single drug was capable of covering the conditions encountered; so that he swept aside with one sweep of his arm all the jargon and charlatanism of the formidable catalogue which I have just recited, and gave to the world for all future time the single remedy which could be studied and measured, the simple trituration with a single vehicle, sugar or milk, or its dilution, in tincture, with a single menstrum, pure alcohol, and thereby established his place beyond all question or dispute, as the great medical reformer of all peoples and of all ages.

It would be impossible to make an adequate selection from the hundreds of prescriptions described and recommended in all their elaborate modes of preparations, in the pages of this

great standard work on medicine, as it appeared just before the days of Hahnemann; but I can cite the ingredients of a few, taken almost at random:

A syrup of the celebrated D'Aguin, "To draw forth watery humors," contains the following drugs:

℞. Roots of Mechoacan,
French Orrice,
Vulgar Dwarf Elder,
The Pulp of the seed of Carthamum,
Seed-bag of Eastern Senna,
Dry-leaves of Sea-Bindweed,
Gummie Turbinth,
Hermodactyles,
Jalap,
Picked Rhubarb,
Roots of the Bigger Valerian,
Eringo's,
Elecampane,
Afarabacca,
The Bark of the Root of Capers,
Tamarisk,
Yellow-Saunders,
Seed of Dwarf Elder,
Juniper Berries,
Leaves of Ceterach,
Agrimonie,
Germander,
Flowers of Broom,
Filings of Steel ty'd in a bag,
White Montpelier-Tartar.

The Resumptive Syrup is composed of the following:

℞. Of the flesh of Wood-tortoises,	i lb
Of River Crabs,	3viii
Pick'd Barley,	
Pulp of Dates, and the	
Fairest, largest Raisins of the Sun,	aa 3ii
Jujubs,	
Sebesten,	aa No. xii
Liquorice, scrap'd and bruised,	3i
Pine-Kernels,	
Pistaches cleansed,	
Seed of the Cotton Tree.	
" Melon,	
" Cucumber,	
" Citrulls,	
Flowers of the Water-Lilly and Violets,	aa 3ss
Seeds of Lettuce and Wild Poppy	aa 3ii

The "Lozenges of Magnanimity" are highly esteemed for those that are cold in the act of *Venerie*.

They consist of Pulp of Pistaches, Condited Roots of Stayrion, Conserve of flowers of Rosemary, Confection of Alkermes, prepared with Amber and Musk, Bodies of Vipers, and Livers, Oriental Pearls, prepared, Seed of Rocket, Reins of

Land-Crocodiles, Lesser Condarnons, Root of Galanga, Cloves, Cinnamon, Mace, Ambergris, Oriental Musk, and sugar dissolved in Orange-water, and boyl'd to a solid electuary.

A powder described as "very famous and in high request in England, against Epidemic Distempers, particularly against the Small-pox and Measles, and also highly commended for the Plague, and to strengthen the Heart and all the Noble-parts against the malignity of these Diseases, and against Pestilential-Air," is the following:

- R. The black extremities of the feet of large Sea-Crabs,
River-Crabs'-Eyes,
Eastern Pearls, and Red Coral, prepared,
White Amber, Root of Contrayerva,
Spanish Counter-poyson,
Bezoar Stone, Deer's Heart-bone, and Saffron.

From the celebrated D'Aguin, again, comes an Epileptic Powder, as follows:

- R. Roots of Male-Piony gathered at the beginning of the spring,
in the decrease of the moon, and seed of the same,
Roots of White-Dittany, and Mistletoe,
Shavings of a man's skull that dy'd a violent death,
" Of Unicorn's horn, of Ivory,
" Hoof of an Elke,
Oriental Pearls, Jacinth-Stone, and Red Coral, prepar'd,
Seeds of Clove-Basil, Flowers of Tylet, Betony, Lilly Con-
valy, Ambergrise, Oriental Musk, Leaves of finest Gold.

A Powder for Women in Child-birth:

- R. The stones of a Horse bak't in an Ov'n according to Art,
Sharp-biting Cinnamon, Date-Kernels,
Borax, Saffron, and Leaves of Savine dry'd, with
Trochisches of Myrrh.

The first and last ingredients may be left out, where the Persons are too nice, or where there is not so much strength required in the Operation.

A powder for Hysteria is composed of the warts that grow on the inside of a horse's leg, or Assa-fetida, and the Horn and Hoof of a Goat.

A powder made up principally of the Sperm of Frogs, with Myrrh, Frankincense and Saffron is highly recommended for internal Haemorrhagia's, "for," it is said, "the coldness of the Frog-water coagulates the blood."

A nephritic powder is prepared from River-crab's Eyes, Stony-bones in the heads of Perches and Lesser Whittings, Dry'd Chestops, Goat's blood, prepared, and Seeds of Gromel.

The Treacle of Andromaches the Elder, is composed of 63

separate ingredients, including trochisches of Vipers, Hair of St. John's-wort, Hair of Mountain-Poley, Juices of the Excrescence of Cistus, Bitumen, Castoreum, and Honey, all made up in strong wine.

In another "Reform'd Treacle," are contained 24 ounces of the "Bodies, Hearts and Livers of Vipers," together with 36 other ingredients.

There is a "Confection of Jacinths," made up of Hyacinth Stones, Red Coral, the Bone of a Deer's Heart, Shavings of Hart's-horn and Ivory, Smaragds, Sapphires, Topazes, Eastern Pearls, Raw Silk, Leaves of Gold and Silver, with 15 other ingredients. It is said of this remarkable medicinal stone-quarry, that "the great vent which several cities have for this Confection, Alkermes, Treacle, and some other compositions of the same nature, has not been sufficient to satisfie the Avarice of several jumlbers, who not content to foist into this composition several ingredients altogether unuseful, in the place of the true ones, which are usually dear, make use of a syrup extraordinarily boyl'd, to one entire pound of which they add an ounce or at most an ounce and a half of the Powder." They seem, in fact, to have made up a sort of first decimal dilution of the conglomeration as prescribed; but the learned author stigmatizes them as "perfect cheats," just as his successors did Hahnemann and his followers, while still clinging to the dear conglomeration itself.

In making up "Trochisks of Vipers," you take as many as you think fit, and the author says that you need not mind the sex, for the Males are as good as the Females, being "most extraordinarily active, vigorous and fleshy;" in fact, when the females are full of eggs the males are to be preferred. The allegation that the males are not so good on account of frequency of coition is not to be heeded, this frequency proceeding, as it does, "from an abundance of spirits, and which is a mark of the vigor and good Constitution of the Creature." These troches are especially useful against poisons, serpent-bites, and malignant diseases.

There is a pill called "the Stinking Pill," composed of 16 ingredients, and especially efficacious for the "purging of thick and vicious Flegm, and for Gouts and Rheumatisms, and all Diseases of the Joynts."

Then there are strange "Oyls," oil of Quinces, Oil of Mastich, Oil of Earth-worms, Oil of Scorpions, Oil of Foxes, Oil

of Vipers, Oil of Lizards, and the like; there are Balsams in abundance, and of strange composition, one for the stomach, one for the womb, one for teething children, one for easing pain, of which the stinging nettle is the principal ingredient; there are powders to put up dead bodies, aromatic linen sear-cloths, ointments and liniments, cerates and plaisters, among others "The Plaister of God's Hand," in which are found, in a numerous company, Litharge of Gold and Lead-stone: a plaister against Burstness, or Hernia, made with the boiled skin of a ram, with the wool on, earth-worms, Litharge of Gold, oils of quinces and whortleberries, and yellow wax, Black Pitch and Rosin, and a multitude of other ingredients, winding up with three ounces of Mummy.

All this confusion worse confounded, Hahnemann swept away; but did he, as the Germans say, "empty out the baby with the bath?"

By no means. A mere "reformer," an iconoclast, a man without that extremely rare faculty of reconstruction, would have, in the light of his newly awakening science, cast all into the limbo of discarded superstitions, and built up *de novo* from the drugs and chemicals of his day.

But Hahnemann knew that all this fruitage of the past must have had some basis of truth; within the decaying pulp was the living and generative kernel, and this he sought most painfully and laboriously for years, and from it presented to the healing science of all schools, the instrumentalities which it now employs, and as it now employs them. It is a far cry to pre-Hahnemannian medicine, but for medicine as Hahnemann left it, it is merely stepping from one room into another.

At first sight, the agglomeration of drugs into confused and confusing mixtures of, sometimes, more than a hundred different substances, must appear to leave such mutually adulterated medicines useless in practice. It is certain that all sorts of neutralizations and incompatibilities must have arisen in such mixtures, and that they represent, not anything of science, but the mere addition by each new hand, of celebrity enough to give him a status in the profession, of some new constituent to a previously overloaded mixture, to improve it for use. It was simply padding.

It is told of a consultation of eight eminent physicians, centuries ago, when the patient was a man of great wealth and in-

fluence, that one of the eight consultants failed to arrive until the consultation had been concluded and the fateful draught prepared. Hurrying in, he paused, and then, taking a small seed from one of his pockets, he gravely marched up and deposited it in the mixture. "Why do you do this?" he was asked. "How," he replied, "can I justly claim my share of the fee, if I have contributed nothing to the prescription?"

But a careful study of these complex mixtures shows that they are not made up, like many of the Chinese medical formulae, without sense or reason. It is very interesting indeed to carefully study these old prescriptions, for we will find in every one of them, as a rule, some dominating medicine which still holds its own, and has been approved by the latest science, as a prime factor in the treatment of the same diseased conditions to which they were then applied.

It was a task of years for Hahnemann to trace back for centuries, and in some cases for many centuries, the history of these individual drugs, and thereby accumulate a vast fund of facts on which he was able to broadly generalize, with a soundness and certainty not less complete and admirable than was the case with Darwin, or any of the later great lights of science.

Out of the bitter came forth the sweetness, and out of weakness and confusion came forth strength. We shall find in these old mixtures, with all their empiricism and recklessness, nearly all the great constituents of our modern *Materia Medica*, not only of one school, but of all schools, excepting only those medicaments and chemicals not then known to mankind. And we shall find also the basis and practice of our serum-therapy, of our anti-ptomaines and anti-toxins, and animal extracts, which have appeared so copiously in our latest day, and which we have so vaunted as the product of the latest perfected medical science.

See what orthodox medicines we shall find here, taken at random: Valerian, Calendula, Hartshorn, Elecampane, Red Coral, Senna, Turpentine, Jalap, Rhubarb, Juniper, Broom, Iron, Cream of Tartar, Waterlily, Rumex, St. John's Wort, Wormwood, Asparagus, Althea, Stone-parsley, Penny-royal, Rue, Chamomile, White Bryony, Fennel, Sabina, Ground Ivy, Anise, Dandelion, Hops, Spikenard, Cumfrey, Sumac, White Poppy, Colts'-foot, Fountain-water, (a most important medicine, by the way), Hyssop, Hore-hound, Cotton-tree, Cotton-tree Seed, Cucumber Seed, Black Poppies, Viper-grass, Dit-

tany, Balm, Dock, Saffron, Male-fern, Orange Peel, Mint, Agaric, Antimony, Mercury, Squills, Orris, Gum Arabic, Musk, Ambergris, Cinnamon, Kermes Mineral, Diaphoretic Antimony, Nutmeg, Sweet Mercury, Sulphuret of Iron, Bryony Root, Aloes, Mastic, Melon Seed, Sorrel, Gold, Basil, Storax, Silver, Boll Armonack, Peony, Centaury, Pumice Stone, (for dentifrice), Burnt Hartshorn, Cuttle-fish bone (for dentifrice), Civet, Oil of Rhodium, Cloves, Dragon's-blood, Alum, burnt and unburnt, Benzoin, Tackamahack, Laudanum, Sweet-flag, Wormseed, Gentian, Coriander, Tormentil, Borax, Myrrh, Asafoetida, Oil of Amber, Frankincence, Snake-weed, Pomgranate flowers, Earth of Vitriol, Horse-tail, Marjoram, Sage, Lily-of-the-Valley, Hellebore, white and black, Nigella, Scammony, Pepper, Opium, Ginger, Cistus, Wild Carrot, Galbanum, Bitumen, Castoreum, Bdellium, Laurel, Ash, Cummin, Salt of Iron, Oak berries, Hyssop, Spurge, Saxifrage, Flea-wort, Gamboge, Ammoniac, Elaterium, Salt of Steel, Juniper-berries, Purging-thorn, Manna, White-lead, Camphor, Bitter Almonds, Agrimony, Madder, Crocus, Rose water, and Oil of Rose, Amomum, Calamus, Hiera, Vitriol of Iron, Mugwort, Sweet Mercury Sublimate, Venice Turpentine, Olibanum, Cinnabar, Purging Magistery of Tartar, Salt of Mars (Iron), Oil of Bitter Almonds, Oil of Eggs, Oil of Laurel-berries, Jasmin, Hemlock, Agnus-castus, White Wax, Flowers of Sulphur, Salt of Tartar, Gum Elemi, Olive Oil, White Vitriol, Verdigris, Balsam Apple, Stinging Nettle, Ginger, Storax, Orange-flowers, Venetian Ceruse, Poplar, Kidney-wort, Mandrake, Henbane, Deadly Night-shade, Burnt Lead, Brass, (Tutia of Alexandria), Litherage of Gold, Ceruse of Venice, Rock Alum, Castoria, Primrose, Salix Nigra, Woodbine, Ox-eye, Rosin, Rust of Brass, Opoponax, Flax-seed, Quicksilver, Lead-plaster, Calcined Vitriol, Magnet-stone, Burnt Lead, Ivy, Tobacco leaves, Diachylon, Vervain, Lapis Calaminaris, Loadstone, Arsenical Magnet, Yellow Sulphur, Chrystalline Arsenic, Galls, Mummy, Sugar of Lead, Burnt Pewter, Minium, Crocus Martis, Vulgar Cinnabar, Cantharides, Alabaster, Greater Celandine, Spirit of Wine, Sugar Candy, Roman Vitriol, Enphorbium, New Milk, Yolks of Eggs, Extract of Opium, Linseed Meal, Radish root, Red Tartar, Santalin, Bruised Peach-kernels, Opaline Magnesia, Salt of Saturn, Distilled Waters, and a multitude of other drugs far too numerous to recapitulate.

Take this list and compare it with the up-to-date pharmacopœias of any school of medicine, and, allowing for changes of name, they will nearly all be found to be included, and applied much as was done in those old days, after Hahnemann had taught us how to take these strange jewels from their barbaric and incongruous settings, and reset them for all time in the diadem of scientific medicine. For that is precisely what Hahnemann did, and he was the first man who ever did it, and he did it better than it ever has been done since his day.

Out of the mist he brought the light, out of the milky way of the past he brought forth glorious stars and constellations, and the whole advance of medicine up to our own day of grace was by him made possible, and more than possible, for it was made imperative, for all time to come, whatever the mode of practice, or the school of medicine. For this the late Professor Robley Dunglison, my old teacher, used to tell me that mankind could never erect to the memory of Samuel Hahnemann a monument too high or too grand, to correspond with the transcendent merits of that great man.

He did not guess them out, as we so often do in these days, but he worked them out, and the work which he saw before him was so vast, and the time so short, that during those days of toil and suffering, he only allowed himself to sleep on alternate nights; all the rest was given to mankind, for he well knew that while "Art is long, life is short, and opportunity is fleeting." He sank himself in his work, and his work will live when individual name and fame are forgotten, for a great, undying truth has been acquired, by all science for all time. If the culmination is not yet here, it is rapidly approaching.

But among those old medicaments we find another list, which the genius of Hahnemann largely rescued from empiricism, and which still survive, nay, indeed, claim to have been but now created, in the full light of our modern medical science. I refer to animal juices, the juices of animal glands and organs, and of animal products, and now known as antipomaines, animal extracts, gland extracts, serums and the like. It must not be forgotten that our anti-toxin serums, anti-diphtheritic, anti-tubercular, etc., are prepared almost precisely like these old extracts, since they are subjected to prolonged heat, and afterwards to carbolic acid for complete sterilization. They are in no sense living juices, except as boiled eggs or beef soup are living, or as those old extracts were

living. These medicaments, as found in the old records, include the Flesh of Wood-tortoises, River Crabs, Crab's-eyes, Prepared Pearls, Red Coral, Bodies of Vipers, Livers of Vipers, Ambergris, Pulverized Hearts of Vipers, the Black extremities of the feet of large Sea-crabs, Bezoar Stone, Deer's Heart-bone, Shavings of Ivory, Oriental Musk, Shavings of Unicorn's Horn, Shavings of a Man's Skull that dy'd a violent death, Hoof of an Elk, Hart's Horn, Stony bones in the Heads of Perches and Lesser Whittings, Prepared Goat's-blood, Troches made of Vipers, Camel's Hair, the Belly of the Land Crocodile, Raw Silk, the Bone of a Deer's Heart, Kidneys of Land Crocodile, Pizzle and Testicles of a Deer, Powder of Vipers, Trunks, Livers, and Hearts of Vipers dry'd in the open air, out of the Sun, Wolf's Liver, large earth worms, live Scorpions, (in one case 300 Scorpions taken in the Dog-days), Flayed Young Foxes, Live Vipers, Live, green, vigorous Lizards, New-laid Eggs, Civet, Deer's Marrow, Goat's Tallow, the Fat contained in the Vesicle of Castors, Duck's Fat, Hen's Fat, Juice of River Crabs, raw, Barrow's Grease, Calcined Bone of an Ox's thigh, Bear's Grease, Marrow of an Ox's thigh, Newly-flayed Eel-skins, not salted and washed in Lime Water, Goat's Suet, Live Frogs, Purged earth-worms, Barrow's Fat with Calves' Fat, Viper's Fat, Beyond-sea Mummy, Cantharides without wings or heads, Man's Skull, Oil of Worms, Lizard's Dung, and a number of others.

Comparing these with Proto-nucleins, Thyroid and other glandular Extracts, Supra-renal Capsule, Anti-Toxins, and the like, the list grows quite respectable.

What Hahnemann did, for he used a few of these in his *Materia Medica*, was to cull these out, to prove what their efficacy was, and to finally determine their applicability. He seems to have been afraid to suggest "Vipers," with which pre-Hahnemannian medicine abounds, and which must have had decided efficacy to account for their long and extensive use; it was reserved for Hering, his disciple, to introduce the serpent-poisons, of which a number are now used in medicine, as well as other animal secretions and virulent extracts.

In the United States Government report on that destructive disease in tropical regions, Surra, a parasitic animal disease which is fatal to horses and camels, (Bulletin No. 42, Dept. of Agriculture), the only remedies recommended, after long experimentation, are Arsenic and "subcutaneous infusion of

spleens." This latter was because the arsenic treatment left, on autopsy, some atrophy of the spleen. "Consequently," it is said, "Subcutaneous infusion of spleens have been made, to see whether the material injected would perform the function of the atrophied organ. Encouraging results have been obtained." It is added: "In some of the later cases under our treatment those fatal symptoms have been successfully combated by the subcutaneous injection of infusions of spleen and testicle, (sheep)." This is published on the authority of Lingard, the leading authority on Surra.

After the appearance and the general adoption of the great French work of Charras, from which I have quoted, and up to the days of Hahnemann, other works of authority appeared, but no change was made in the old system of drug conglomeration or administration. In addition to the medicaments so heterogeneously jumbled and administered, there were four great agencies in universal use, viz.: Bleeding, bleeding to excess, bleeding to syncope; Blistering, Purging, and full salivation by mercury. These persisted long after the days of Hahnemann, but when he had reconstructed medical science, their occasions for employment grew fewer and fewer, and now they have, at length,

"Folded their tents like the Arabs,
And as silently stole away."

In 1712 appeared Turner's well-known Treatise on Diseases of the Skin, inscribed to the Royal College of Physicians in London, of which the author was a member. This book of itself refutes the absurd allegation so often made against Hahnemann, that his "Psora-theory," (which is now accepted in substance everywhere), was founded on the mere supposition that Scabies was a general infection, and in ignorance of the fact that it was produced by the acarus, the little itch-insect, working under the skin. Indeed the agency of this acarus was known and described as early as 1772, which was long antecedent to Hahnemann's writings—in fact when Hahnemann was barely 19 years old. Turner, whose classification and nomenclature of skin-diseases were surprisingly up to date, shows that the Itch, at first, is altogether local, and conveyed by a "seminal principle," and is then quite curable by topical applications, which were substantially the same as those now

employed. "But," Turner says, "these are to be applied time ly, before it has sunk deeper into the glandules, and by the circulating Fluid, through the capillary Vessels, transmitted its Vernom into the Blood, whose Crasis it very quickly disturbs and contaminates;" which is as true to-day as it was then. This local disease was never known as Psora; Turner describes "Sora," long known to the Arabs, and described by Sennertus, Fallopius, Sydenham and others as follows: "Flying suddenly over the whole Body, and raising little lumps under the skin, like those from the stinging of Nettles, producing an intolerable Itch in the Parts. A small Fever begins, and is presently followed by an *Eruption of Pustules* almost over the whole Body: They soon strike in and hide themselves under the skin, and itch exceedingly after scratching, appearing again presently. . . . Hartmann boasts of his having cured infinite Numbers of People of this Disturbance by anointing with the Blood coming away with the Secundine, or Afterburthen of a Woman," a serum, by the way,

To show the status of the art of medicine, just before Hahnemann's day, I will cite the following clinical case from the Fifth Edition of Turner's work, published in 1736, just nineteen years before the birth of Hahnemann. The case was that of a "maiden Gentlewoman," suffering from a slight attack of Lepra. This eminent practitioner began with 12 grains of calomel at night, purging it off next morning with Senna and Rhubarb. This threw the patient into hysterics, and he concluded to try Vipers, of whose flesh he made boluses and administered them morning and evening for a month. At the same time he employed a "topick" of pomade, sulphur, and Bismuth, and a lotion of Elder flowers and tartar, used, each of these, twice a day. After two weeks no improvement appeared, and he used freshly-killed vipers, (the others were probably cold-storage), made into a broth, in the proportion of half of a chicken and a whole viper to a quart of water, boiled down to a pint, and this quantity she took at two draughts, morning and night, each day. "Having thus regaled," the author says, "with about 40 Vipers, and as little advantage, she returned to me again," and he then wrote her a new prescription: Conf. Fumariae, Aethiops Mineral, Antimonium Crudum, triturated together; and this she took night and morning. Also Rad. Lapathi, Sarsaparilla, and China. Then came white precipitate of Mercury, as one local, and Turpeth Min-

eral in Lime-water as another, and with this latter she touched the scales frequently with a brush or feather. Once a week he "adventured to carry the Humours downward by the following Lenient:" Rhubarb, Tamarind, Salt of Tartar, and Coriander Seed, boiled with Manna.

After three weeks she was sensibly amended, and henceforth she used only the Pomate and Bismuth; but he ordered a chalybeate course and some pills, and every spring she has recourse to her electuary and diet drink for a month, taking, at the same time, German Spa-water, and Tincture Antimon. alterans.

He then cites a somewhat similar case "under the direction," he says, "of that notable Physician Sir Theodore Mayern," of a "virgin lady, about 13 or 14." Once in three days the doctor purged her with a pill of "Coch. min, Calomel, Gold leaf, and oil Anise." In the intervening days she took twice a day an Apozem "Ex decoct, Pom. redol, Scabios. Ras. C. C. and Eboris," edulcorated with the "Syr. Viol. de Cichor. and de Fumar. and then acidulated with Spir. vitr." Three days after the last purging he ordered a bath of warm water in which had been decocted leaves and roots of "Lapathi, Scabios, Saponar, Vitis, Salicis, Cortex Nymph, Median. Frang. Rad. Enulae Fol. Malv. Viol. Parietar. addito sursure multo, and Lacte Vac., rec."

She was in this bath two hours, if she could stand it so long, and was then put to bed. After eight days, at the end of the first hour she drank a large draught of whey, in which had been steeped all night, Herb. Fumar. Cichor. Endiv. Hepatica, and at 5 in the afternoon another of the same. After eight more days the course of bathing and purging was repeated, and after that she was sweated in bed each morning with a bolus of Diapbor. Magistralis, Theriac. Andr. and Calendula flowers. She then drank freely of hot Posset-drink prepared Ex. Ulmar, Card. b. and Scabios, and then lay still for two hours. She was kept to this for eight days, and then purged, when the Bath and Medicated Whey again took place for four days.

Then he ordered the following Magistral Electuary, of which, the author says, she was to eat, for she could scarce swallow it otherwise; from six teaspoonfuls to an ounce four hours every morning before dinner, for a month or longer, "walking gently afterwards, to put her Body into a kindly warmth, without sweating."

The electuary consisted of ten ingredients, of which the principal one was Flesh of Vipers caught at the same time, and prepared—4 ounces. If the scales did not drop off then, she was to be anointed with a Composition prepared from ten other substances, among which may be noted Bryonia and Litharge of Gold. She was ordered to be very exact in her diet, and, as a substitute for strong drinks, a new dose was prescribed which she was never to be without the whole year round, and which formula occupies a half page of the book, with minute directions for brewing, stewing, and expressing, and consisting in all of eighteen or twenty different “medicaments.” It was to be kept in a jug, six gallons drawn down to four, and kept on the cellar steps, as it were, so as to be handy.

The issue of the case is not stated, except that “great hopes were placed in her growing better when she came to enjoy the usual Benefit of the menstrual Purgation,” which, from her age, could not be delayed more than a few years.

In Quincy’s *Medicina Statica*, with the Aphorisms of Sanctorius, published in London in the year 1728, (and which contains a capital Galenical theory of how the juices and oils of Vipers act in the cure of Gout), this celebrated physician, who was a great admirer of the philosopher Locke, pays his respects to the medical philosopher of his day, as follows:

“It has something in it that would move one’s laughter as well as amazement, to reflect upon the Extravagancies of some subtle crafty Heads, who to account for the Operations of a human body, have abstracted and spiritualized upon it, (if it may be so termed), so far as to assign every particular Part some sort of Intelligence or Soul, which rules and manages it in the Performance of its Offices. By this we come at once to know that the Stomach digests, that the Liver sanguifies, and that the Brain makes Spirits, because these Parts have such Faculties presiding over them, which, as long as they are pleased, make one digest, another sanguify, and so on, as the Occasion of the Constitution require. And upon this Means likewise, there is laid open a direct and pleasant Road to the Art of Healing, when any one part happens to be distempered. For to this there is no more required, than to apply such remedies as the indisposed Faculty delights in.”

“But that extraordinary Chymist, Van Helmont,” he says, “has carried this Way of Reasoning still much farther; and to make the work short, has set but one general Deity over the

whole, which he calls the *Archaeus*; and by this he has not only showed a commendable zeal against Polytheism, and thrown out of the human Body all those Pagan Deities, which had their rise only from the Invention of a corrupted Generation, but has also laid open a still much nearer way to the Art of Healing, if any one could be so happy to find out that particular Oblation, which his *Archaeus* would accept of, but this is what I think yet remains undiscovered."

The young Hahnemann about to appear was certainly being prepared to enter a very stormy and dangerous neighborhood, as dangerous as for a new-comer to thunder forth some new doctrine of theology from the pulpit of an old Scotch kirk. He was foredoomed to failure with the mass in that age, but he was not for that age, but for ours, and for future ages. He came, as with a girdle of camel's hair, with a diet of locusts and wild honey, to prepare the way of Healing, and to make its paths straight. Like Saul of Tarsus, in the Areopagus, he came to cry—"Ye men of Athens, in all things I perceive that ye are somewhat superstitious. For, as I passed along, and observed the objects of your worship, I found also an altar with this inscription, To the Unknown God. What therefore ye worship in ignorance, this set I forth unto you." While Hahnemann was so incessantly and so laboriously penetrating through the records of all languages, (for he knew all those in which the language of medical art and practice was used), and discovering the *rationale* of the actions of long recognized remedies, there came before him a great fact, nay, an overwhelming flood of facts, which he was driven, most unexpectedly and unwillingly, to recognize, which fact Hippocrates had long before dimly expressed, in saying that many diseases are cured by drugs producing similar sets of symptoms; and from the proof of these facts he was compelled to a great generalization, the entire law of dynamical cure, as had been already partially stated by Hippocrates. He was not blameworthy for this; it is what might have happened to any one; it is what indeed did happen to Isaac Newton, when he had correlated and compared the various simple but far-reaching phenomena of bodies falling to the earth. If rain-drops were thus affected, so were the clouds; if the clouds, so the atmosphere; if the atmosphere, so the moon, and so the tides; if these also, so the planets. The greater included the less; there could be no stopping place, and the universal law of gravitation was demon-

strated and announced. And there were not and could not be two antagonistic laws. Apparent exceptions, the diffusion of gases and vapors, the ether itself, light, heat, electricity, all nature, in fact, only gave new proofs of this general law, and we have now carried its scope far beyond Newton's day, and find it controlling those binary and multiple stars, far, far beyond the limits of any visible parallax, as they rotate around each other on the apparent boundaries of the universe.

And Hahnemann took his appointed place with Socrates, and Paul, and Copernicus and Galileo, and Lamarck, and braved and passed through the fires of martyrdom, in defence of the inevitable and indisputable, and now clarifying, truth. He dared not lie; rather than lie he gave up, when a young man, a large and lucrative practice of medicine—abandoned it in despair, because he simply could not practice and teach it, and for years eked out a miserable existence as a chance translator of chance things for publishers and others. In those grim days he worked forty hours out of every forty-eight, threaded the baffling mazes of thousands of years and dozens of nations, and, at last, saw the light, and followed it. Says the greatest of ancient Chinese philosophers,

“Make use of the Light, returning home to its source,
You will lose not your body in calamity's cause,
And will train with the Eternal at length.”

He passed through calamity's course, but it did not submerge him, and he now trains with that great galaxy,

“The noble of all ages,
Whose deeds crowd history's pages,
And Time's great volume make.”

But, as Hahnemann pursued his experiments, another important fact was forced upon his attention, a fact so simple that every Sub-Lieutenant of Marines now knows it, when he orders his squad to break step while marching up the gang-plank to board a warship; but which Hahnemann did not learn until he had nearly killed himself by overdoses of drugs, in those “painful experiments upon his own person,” which his critic refers to as an evidence of his courage and perseverance. Briefly stated, this important fact is, that sensitive bodies having a definite

vibrating note, like a tuning-fork, for example, are much more powerfully affected by a rythmical stimulus having a vibrating rate, nearly or quite corresponding to their own. Consequently, a drug having a specific action on any part of the living body will become far more energetic, nay, may become actively poisonous, when administered in an affection in which the activity is especially sensitive to, or synchronous with, such drug activity. With his remarkable powers of analysis, he at once proceeded upon a series of experiments to test whether this was a coincidence merely, in certain observed cases, or whether it was a general law. The whole world now recognizes that, as Hahnemann's experiments demonstrated, it is one of the natural laws, and of universal application.

This led Hahnemann to employ the minimum dose, that is to say, the smallest quantity which will, experimentally, produce the desired effect in each given case; and that, in order to determine it, each case must be individualized by its phenomena, instead of having whole groups of cases slavishly classed under general headings, and then treated in the mass. This, too, is now universally recognized in all schools of medical science, the question now asked being, not how much can the patient bear, but how little will accomplish the work. It is, in other words, the physical "Law of Parsimony" as applied to medicine. So reducing the quantity of crude drug, either by dilution in alcohol, and violent shaking to distribute its particles throughout the menstruum, and attach them to the molecules of the menstruum, or by triturating it, in successive triturations, with some non-medicinal, hard, crystalline substance, such as sugar of milk, he discovered, in many cases, that the drug-activities, when similarly acting, did not diminish proportionately with the quantities of the crude drug contained in the preparations; that, in fact, under such circumstances, the drug seemed to take on new activities as to partially become more and more finely divided. This is mere horn-book knowledge now, but, surprising as it may appear, this was the great "foolishness" in the eyes of the old practitioners, and the "stumbling-block" of the theoretical philosophers. Of course, Hahnemann could not, in those days, demonstrate this truth by physical or chemical experiments outside physiological action, as we have since done; all he could do was to show the patient sick, and who, *secundum artem*, should presently be dead, but who, on the contrary, suddenly became

well and hearty ; but with critics who would not come and look, and who were too ignorant and bigoted to try the experiment for themselves, but contented themselves with ridiculing the allegation and damning the allegator, not much progress could be made. Like Christianity, and some other things, this was a matter for the future.

We now know that all this process and result are philosophical and scientific, and how, even, apparently inert substances, such as sulphur, carbon, calomel, lycopodium, and the like, can induce new physiological and pathological activity, and even become dangerous, when subjected to the processes first employed and freely offered to the world by Hahnemann. Who does not know of Sir Wm. Crookes's experiments with closed glass vessels charged with simple atmospheric air of varying densities, and with electric conductors sealed into the ends. At atmospheric pressure, no results ensued, under the air-pump the air was gradually withdrawn, and when it reacted one-millionth of its normal density, the electricity took up those atmospheric molecules, which now had elbow-room, so to speak, and hurled them against the glass of the opposite end of the cylinder, until it became red-hot and melted down, or else was shot full of holes, when the atmosphere rushed in, and all the phenomena ceased. The modern pharmacopœias of all schools of medicine now recognize the principle of Hahnemann's triturations and dilutions.

It is clear that there then was, and can still be, only one possible and rational way to determine how far this dilution or trituration could be carried, and that was by the practical method of experimentation. But this was the very thing which the world would not use ; when Galileo asked an ecclesiastic of rank to only look through his telescopic tube, the critic replied in wrath that he would not so insult God ; and Hahnemann's critics replied that they would not so insult common-sense. But science often has to do this very thing. As Jevons, the well-known scientific authority, says, in his "Principles of Science," "Science does nothing to reduce the number of strange things that we may believe. When fairly pursued, it makes absurd drafts upon our powers of comprehension and belief." It was Sir John Herschel who said that in the investigation of RESIDUA, those left-over things which could not be reconciled with either science or common-sense, all the great advances of scientific knowledge had been made.

When the phonograph was first exhibited, a few years ago, before the French Academy of Sciences, Flammarion, the astronomer, who was present, tells us that a middle-aged academician, with traditions drawn from the classics, and nobly indignant at the audacity of the inventor, rushed to the man who represented Edison, and seizing him by the collar, cried, "Wretch! we are not to be made dupes of by a ventriloquist!" and even six months later, the same academician stated before a like assembly that he considered himself bound in honor to declare that after a close examination he could find nothing in the invention but ventriloquism, because it "was impossible," he said, "to admit that mere vile metal could perform the phenomena of human phonation."

We all know how Galvani's discoveries were received, which discoveries have transformed the world, and how for years he was stigmatized as "the frog's dancing master." We know how Franklin was criticised by men of science for wasting his time on kite-flying, and who asked him, "Of what use is it?" and also of his immortal reply, "Of what use is a baby?" We know how Dr. Lardner demonstrated the impossibility of crossing the ocean by steam-power, and that his pamphlet was carried to America in the very steam vessel which he derided. When Lavosier analyzed the air, and discovered that it was composed principally of two gases in admixture, Baume, the celebrated chemist, and the inventor of the areometer, learnedly wrote, in the true Galenical vein which Hahnemann so frequently encountered, "The elements or principles of bodies have long been recognized. It is not to be imagined that these elements, regarded as such for 2,000 years, are now to be placed among the number of compound substances. Are we now expected to surrender our belief in fire, water, earth, and air? Thus far they have served as our basis for an infinite number of discoveries and support brilliant theories."

The history of science, since Hahnemann, is one long category of exploded fallacies of antiquity, supplemented by others, many to be yet exploded in turn, for the sciences advance to higher planes over their own dead selves.

How far could the dilutions and triturations of Hahnemann be profitably carried? He left it unsettled; he tells us that in one case he cured a case of dementia with a preparation of gold, and did not use more than one-ninth of a grain of the metal in all. Richard Hughes tells us that with camphor

Hahnemann always used the primary solution, "one part of camphor to from 6 to 12 parts of alcohol." For cholera the saturated solution was recommended.

In other cases, especially in chronic diseases, and with other drugs, he experimented successfully, and often with surprising results, with dilutions or attenuations, carried up to what he called the decillionth proportion; not what would be called the decillionth potency, however, if there was such a thing, but a proportion of drug to menstruum in that ratio. It looked absurd, but only to those who considered that they knew or thought they knew all about the ultimate constitution or potency of matter. Naegeli and his successors, only a few years ago, conducted extensive series of experiments to determine how far dilution could be carried without the disappearance of physiological results. In a solution of silver nitrate of one part to one quadrillion parts of menstruum, common water, vegetable organisms perished in four minutes. With a solution of one part of corrosive sublimate to one septillion parts of water, the organisms promptly died. He found that spirogyra organisms perished in a few minutes in a large vessel of water in which gold or silver coins were dropped but for a few minutes. In fact, he suggested that living reagents might be employed to carry chemical analysis almost infinitely beyond microscopic or spectroscopic possibilities. No one disputes these conclusions now—indeed they have since been carried far beyond the Naegeli experiments referred to, and the question is still open. We are now killing typhoid bacteria in water, with copper in the proportion of one part to a million, and even less.

Modern physicists have objected to the validity of Hahnemann's higher potencies by citing the theoretical fact that at a certain point of disaggregation or diffusion, the number of molecules of the original drug will have become so sub-divided that the supply to each dose of medicine will have been exhausted—so that only by chance, to say the least, could any particle of the original drug be found in the medicine as administered.

This seemed to be rational; but now come the phenomena of radium, and not only of the element radium, but of a large number of other bodies and compounds. Here we find substances that are potentizing themselves and everything around them, as it were, and for all time, and without apparent dimini-

tion of specific activity. A few grains of even a highly adulterated salt of radium, in the form of chloride or bromide, in which the radium itself bears a very small proportion in bulk or weight to the whole mass, shows itself in constant activity of ebullition and radiation. In all directions, just like the light and heat of the sun, these radio-active particles are driven forth incessantly, and with a force which penetrates opaque bodies as sun-light does air or water, and which, at any point, and to a considerable distance, will burn the human skin and flesh, with a lesion comparable with which that of burning phosphorus is trifling; will destroy life indeed almost in an instant, and will communicate its activity to water or like menstrua in which the radio-active particle, (suitably enclosed), may be immersed, so that these menstrua, gallons and barrels in bulk, will take on the same activity as that of the radium itself. And yet the potency and attenuation of the radiations of this substance, radium and other radio-active bodies, are such that an almost microscopic fragment will throw off these active particles into space, radially outwards in all directions, with a speed almost comparable with that of light, and an active energy such as I have described, for years without the slightest diminution of weight, bulk or energy. Anyone who has looked into the eye-piece of a spintharoscope (literally "a spark-viewer"), and seen the coruscating fire-works which fill the field of vision, and who reflects upon this phenomenon in the light of past crude materialism, will instantly realize the truth of what Sir William Ramsay, the most eminent living chemist, has said: "The behavior of the radio-active minerals confound the old theories alike of substance and of energy, and finds its most likely explanation in the hypothesis that the elements are products of electrical disassociation, of the breaking up in series of the radio-active elements of high atomic weight." And this electrical energy of the universe, with which only our most recent science deals, what is it? Is it dynamic? or mass or molecular? material, or etheric?

Says Nikola Tesla: "We are whirling through endless space with an inconceivable speed, all around us everything is spinning, everything is moving, everywhere is energy. . . . Nature has stored up in the universe infinite energy, the eternal recipient and transmitter of this energy is the ether. The recognition of the existence of ether, and of the functions it performs, is one of the most important results of modern scientific

research. The mere abandoning of the idea of action at a distance, the assumption of a medium pervading all space and connecting all gross matter, has freed the minds of thinkers of an ever present doubt, and by opening a new horizon—new and unforeseen possibilities—has given fresh interest to phenomena with which we are familiar of old. It has been a great step toward the understanding of the forces of nature and their multifold manifestations to our senses. It has been for the enlightened student of physics what the understanding of the mechanism of the fire-arm or of the steam engine is for the barbarian. Phenomena upon which we used to look as wonders baffling explanation, we now see in a different light. The spark of an induction coil, the glow of an incandescent lamp, the manifestations of the mechanical forces of currents and magnets are no longer beyond our grasp; instead of the incomprehensible, as before, their observation suggests now in our minds a simple mechanism, and although as to its precise nature all is still conjecture, yet we know that the truth cannot be much longer hidden, and instinctively we feel that the understanding is dawning upon us. We still admire their beautiful phenomena, these strange forces, but we are helpless no longer; we can in a certain measure explain them, account for them, and we are hopeful of finally succeeding in unravelling the mystery which surrounds them."

All is dynamic; all nature is dynamic; and that Hahnemann recognized the great principle of such dynamism in the living body, and in drug-activities, and utilized them as never before is the highest testimony to his gigantic intellect; that he pursued them only by clinical means, by bedside and biological and over and over repeated experiment, is equally strong evidence of his scientific methods and scientific caution. His motto constantly was, "Prove all things and hold fast to that which is good." But Hahnemann never even dreamed of such material potencies and dynamizations as radium shows; perhaps he would even have denied them.

And not only one or two of our elementary bodies, in physics, exhibit such phenomena; many other substances appear to possess like properties, which are revealed to us by the fluoroscope, or other screens adapted to interpret these activities into the scale of ordinary vision, and so exhibit them photographically to the eye. We now know that celebrated healing springs, the action of which, hitherto, had been quite inexpli-

cable, not only in this country, but abroad, owe their great therapeutic powers to radio-activity in their own waters, which long before, and far beneath, were set into this radio-activity by mere contact with ores or salts of this metal deep down in the bowels of the earth. Nay, walls, and rooms, and whole houses take on this radio-activity from similar sources. We have the X-rays, which penetrate where skepticism would have laughed them to scorn only a few years ago, and the N-rays, from every living organ, from finger-tips even, we now know to be the long-derided Reichenbach rays, and the whole field of physical science is sweeping onward to the high plane which Hahnemann, by rigid experimentation, reached long before the sun of our modern science had sent its first pale slanting beams across their unknown waste.

I am not here discussing the validity or invalidity of extreme triturations, which are more matters of philosophy than of practice; all I desire to show is that, in these investigations and experiments, and in honestly facing their conclusions, and bearing the consequences, Hahnemann pursued the correct methods of physical science, while his detractors and maligners pursued the methods of the charlatan, the quack, and the mongers and vendors of superstition. It is time that he had his due.

As Lowell says: "Words, money, all things else are comparatively easy to give away; but when a man makes a gift of his daily life and practice, it is plain that the truth, whatever it may be, has taken possession of him." Hahnemann's scientific method was applied in every field. When the cholera broke out, far away, and he was appealed to for a remedy, by his mere knowledge of the dominating features of the fell disease, and before he had ever seen a case, he indicated the remedies, and these remedies are to this day those drugs used for this disease by all schools of medicine. He did more; for he, with a wonderful prescience, saw, before a microscope had revealed it, or a culture reproduced it, these living, self-reproducing germs of such diseases, the areole of living organisms of cholera, its character as an air-borne germ, the virulence of first attack, the subsequent immunity of the exposed, and all, in fact, of the leading characteristics of the cholera germ as we now know it. It is true that he did not specify its specific vegetable character; but go to the biologist and ask him to draw the dividing line between animal and vegetable in life's lower forms. The zoospores of certain algae, which are vege-

table, and among the lowest of the vegetable, are, to all intents and purposes animals; they live, play, court, love and procreate as animals, and then settle down like the venerable fossils of ancient medicine to a self-satisfied immobility as just common weeds, the drift-wood of the sea.

In 1831 Hahnemann wrote of the Asiatic Cholera, then prevalent and extremely deadly in many parts of Europe, as follows:

"On board ships—in those confined spaces, filled with mouldy, watery vapors, the cholera miasm finds a favorable element for its multiplication, and grows into an enormously increased brood of those excessively minute, living creatures, so inimical to human life, of which the contagious matter of the cholera most probably consists—on board these ships, I say, this concentrated aggravated miasm kills several of the crew; the others, however, being frequently exposed to the danger of infection and thus gradually habituated to it, at length become fortified against it, and no longer liable to be infected. These individuals, apparently in good health, go ashore, and are received by the inhabitants without hesitation in their cottages, and ere they have time to give an account of those who have died of the pestilence on board the ship, those who have approached nearest to them are suddenly carried off by the cholera. The cause of this is undoubtedly the invisible cloud that hovers closely around the sailors who have remained free from the disease, and which is composed of probably millions of these miasmatic animated beings, which, at first developed on the broad marshy banks of the tepid Ganges always searching out in preference the human being to his destruction and attaching themselves closely to him, when transferred to distant and even colder regions become habituated to these also, without any diminution even of their unhappy fertility or of their fatal destructiveness."

It would be difficult to find in the bacteriological literature of to-day a clearer, more scientific or more accurate description of the modes and marches of the cholera, or of the acquired principle of resistance from habituation.

I have spoken, earlier, of the great basic principle of Hippocrates, which Hahnemann scientifically demonstrated by a long course of practical experimentation, and left substantially as the medical world now possesses it; I refer to the statement that "Hippocrates based his principles and practice on the theory of

the existence of a spiritual (or dynamic) restoring essence or principle, in the management of which the art of the physician consists."

Hahnemann, writing in 1805, says of medical practice subsequent to Hippocrates: "From these ancient times (from about 200 years before the Christian era), came the unhappy idea, that if a sufficient number of drugs were mixed in the receipt, it could scarcely fail to contain one capable of triumphing over the enemy of health,—while all the time the action of each individual ingredient was little, or not at all known."

"In this great period of nearly 2,000 years, was the pure observation of disease neglected. The wish was to be more scientific, and to discover the hidden causes of diseases. These once discovered, then it were an easy (?) task to find out remedies for them. Galen devised a system for this purpose, his four qualities with their different degrees; and until the last hundred and fifty years his system was worshipped over our whole hemisphere, as the *non plus ultra* of medical truth. But these phantoms did not advance the practical art of healing by a hair's breadth; it rather retrograded."

The late lamented Professor Conn, in writing of the physiological resistance against morbid agencies, as in bacterial onslaught, shows how the dynamic agencies, on which Hippocrates and Hahnemann relied, act and react. It is a series of successive productions of poisons and counter-poisons. First nature fills the system with certain anti-poisons, the *alexines*, which antagonize bacteria and check their growth. These are nature's offensive-defensive arms. Most of the bacteria thus entering the system are at once destroyed by the alexines. Those which survive, themselves throw out new poisons, the *lysines*. These tend to destroy the alexines, and give free scope for the multiplication of disease-germs; they are the weapons of assault against the system. Then the organism sets every cell at work to produce new anti-bacterial matter, the anti-bodies so-called, and these uniting with one part, the non-toxic, of the ptomaines, neutralize the whole bacterial product. At the same time word is sent through the whole system and the phagocytes, those ferocious, naked, white-cell scavengers, come pouring in countless numbers to the source of danger, the field of battle, and attack, engulf, and destroy the active bacteria, so as to prevent further pollution of the vital current. If the powers of the organism suffice, the enemy is

overwhelmed and destroyed ; but if the attack is too strong, and the enemy too numerous and virulent, then the system will succumb. Just then the serums corresponding thereto thrown into the circulation powerfully re-enforce the organism, by their own anti-bodies, and stimulate it to new efforts, to send forth new reserves, and with these reinforcements the war goes on to success, and the patient is saved. It is the work of medicines to thus call up these reserve powers, so as to enable nature, as it were, to "fight the devil with fire;" and the patient is cured.

Then our medical wise-acres say that the disease is self-limiting. You see how it is self-limiting; it is self-limiting as a war to the knife is self-limiting, in which the genius and power and armed soldiers of a great commander have combined and attacked and rushed upon the enemy and fought and destroyed him, horse, foot, dragoons and artillery.

Says Professor Maragliano, President of the University of Genoa, and Director of the Tubercular Institute of Italy: "The healthy animal organism possesses a double series of defensive measures against tuberculosis which may be called ordinary and extraordinary. The ordinary means are inherent in the tissues when perfectly healthy, and are partly anti-toxic and partly bactericidal. The extraordinary means are of the same nature and develop principally in the presence of the tubercle bacilli that penetrate the tissues. If the defensive means produced by the organism is larger in proportion to the number of invading bacteria, it gains the victory. If the defensive means are insufficient, the organism succumbs. This happens if the number of bacteria is very great, or if the organism is in a weakened condition. In cured consumptives we find antitoxin and anti-bodies in large quantities in the blood; in those who do not recover they are absent or present only in small quantities."

Here we have to-day, in brief, and applied to a single disease, what Hahnemann applied to disease in general. We have, first the ordinary means of antagonism already in the living organism, the armed hosts which constitute the *Physis* of Hippocrates and Hahnemann, and which keep the organism immune; then, when these are overcome, the extraordinary means, which it is the function of medicines to arouse, and which nature is so ready to provide, if the medicine touches the case closely enough; if not, nature fails, and the patient dies.

The instant popular and enormous success of Hahnemann's teachings, experiments, and system, produced a singular and unexpected result. The facts could not be gainsaid; there were clouds of witnesses in every hospital and city; more patients recovered, and more swiftly and safely than were ever known to have so recovered before, and the whole Galenical and empirical system was swept away, among intelligent physicians, as by a besom.

But the old hide-bound mass could not accept the teachings and practice of Hahnemann as an actual entity—these facts simply proved, it seemed to them, that more sick people recovered, and more quickly and safely, without any medicine at all, than they formerly had done under the tremendous avalanches of the past, and the era of "Expectant treatment" came into vogue. We do not hear much of this treatment now, but medical students, so late as even forty years ago, will recollect that that was the orthodox and medically-skeptical attitude of the schools and colleges, up to that period at least. The advocates of this "Expectant" school forgot the concluding part of the principle of Hippocrates, or, for convenience, ignored it, to wit: "In the *management* of which," that is, in the dynamic control of which, "the art of the physician consists;" and to this are to be added, of course, the whole repertory of hygiene, physical agencies, and prophylactic drug treatment. As his biographer says, Hippocrates was not a merely "expectant" physician.

The no-medicine plan has been universally relegated to desuetude—no intelligent physician leaves his patient without medicine, unless he is doing well under medicine, or has as yet no symptoms on which to administer medicine.

On the contrary, the drug repertories of all schools of medicine have been enormously enlarged in the recent past, and, curiously enough, among these new additions are to be found nearly the whole armamentaria of Hahnemann and his school. There is scarcely a single one of the great medicines investigated and brought forward by Hahnemann and his successors, many of them new, which we do not find incorporated into all Pharmacopœias, and now used regularly, habitually and extensively, and with a constantly enlarging range, and with nearer and nearer approaches to the correct therapeutic principles of administration which were so clearly and so fully set forth by this great master.

The reasons for the use of the single remedy at the same time, are now well realized, and are truly practical and scientific. Single remedies can be investigated and their scope determined, but temporary and irregular mixtures are impossible of verification, and lack that stability of phenomena which is demanded by every principle of scientific experimentation.

But Hahnemann was not a slave to the single remedy in the same case of disease. All he asked was that the drug and its true scope and sphere of action should be kept inviolate when presented to the system as a medicament.

When occasion arose, and when one single drug did not and could not be found which would cover all the conditions of the case, he did not hesitate to use more than one, but these he gave alternately, at suitable intervals, allowing each one to manifest its own specific activities independently of the other.

In writing of a serious disease (Purple Rash) which simulated Scarlet-fever somewhat, he says that Belladonna is worse than useless here, and the patients so treated will generally have to die. "Whereas," he says, "all of them might have been saved by the alternate use of Aconite and the tincture of Coffee, the former being given against the heat, the increasing uneasiness, and the agonizing anguish; the latter against the excessive pain and weeping mood. Aconite and Coffee should be alternately given every 12, 16 or 24 hours, in proportion as one or the other medicine is indicated."

We have everywhere, now, in all rational schools of medicine, the single drug, merely admixed or combined with some pleasant vehicle,—perhaps two mutually co-acting and scientifically proven remedies in a single prescription; we have the divided doses, and the smallest doses which experience shows will successfully act; we have the tested physiological indications for the use of each medicine; and we have the principle of special susceptibility of organs and parts to like remedies fully recognized and employed.

One of our leading medical authorities, an eminent professor of Therapeutics of the dominant school of practice, endorses editorially the following as accepted principles of Rational Therapeutics to-day:

1. "Keeping in mind the tendency of self-limitation of pathological processes and the possibility of cure as a result of natural forces, never prescribe a remedy that will interfere with, or upset the conservative efforts of the organism.

2. "Keep the problem of treatment as simple as possible by the exhibition of few remedies, well selected.

3. "Bear in mind the possibility of aggravating existing pathological conditions and introducing new ones, by injudicious or too heroic methods of treatment.

4. "Remember that the benefit to be expected from remedies is generally offset or neutralized when large numbers of remedies are exhibited at the same time.

5. "Try to remove the cause—this presupposes a careful study of the case, rather than a hasty prescription for this, that or the other symptom.

6. "Do not forget that most medicines are two-edged swords—if a medicine does no good it is likely to do harm.

7. "Prescribe for conditions, not diseases.

8. "When necessary, hit hard but not too often.

9. "Watch constantly for symptoms that may be the result of remedies prescribed for the relief of other symptoms."

All this is but a paraphrasis of Hahnemann's discoveries and teachings; Hahnemann might have written all these controlling rules; but no one else who ever lived on this earth, before him.

Samuel Christian Frederick Hahnemann, born at Meissen, in Saxony, April 10, 1755, died in Paris, full of years and honors, July 2, 1843. Thousands followed his body to the grave; the streets were thronged, and his loss was mourned by the largest and most distinguished *clientele* that any physician ever had in that great city.

His body rests in the proudest spot of Pere la Chaise, the grandest cemetery of France. By his side lies Francis Arago, and around him, in a group, almost within arm's-length, are the graves of all those great lights of science and art whose fame has made France illustrious for all coming ages; but his great work is still marching on; it has never ceased and never will.

Throughout the nations monuments are being erected to commemorate his fame, but to see his true monument, it is only necessary to look around; it is only necessary to have loved ones on beds of suffering, or to lie down in sickness one's self, and greet the welcome physician, with his rational and scientifically proven methods, and contrast these with those of that baleful and tyrannic past, not so far distant in time, but world-wide apart in mode and substance,—that baleful and tyrannic

past, hoary with antiquity, and invested with false philosophy and theory, which he forever overthrew and destroyed.

He rests in peace beneath his noble granite monument in Pere la Chaise; elsewhere magnificent memorials have been raised to his fame; in Washington, the capital city of our nation, one of the noblest and most beautiful of all the many monuments to the great, there erected, is that to Samuel Hahnemann, and his fame, as it is to be, has scarcely yet begun.

When the battle-clouds of the fierce and heroic conflict which he so long fought, and won, shall have faded into the calm sun-light of Truth's cloudless sky; when that final common consent of history shall have rendered its unchangeable decree, and we recognize how great he was, in medical art, science, and philosophy, and in toil, energy, and practice, but, perhaps, above all,

“Great in saving common-sense,”

there may be applied to him, in the domain of medicine, that proud epitaph which, in philosophy and statecraft, was bestowed upon Franklin—

“He tore fire from heaven,
And the sceptre from tyrants.”

TO WHAT EXTENT IS IT POSSIBLE TO DRAIN THE PERITONEAL CAVITY?

BY HOMER I. OSTROM, M. D., NEW YORK.

THE early workers in abdominal surgery considered it a *sine qua non* of success, that the peritoneum should be kept dry, that is, drained until all danger from the absorption of noxious material had passed. Agreeable with this conception drainage became a tenet of abdominal surgery, and was practiced in many cases merely as a precautionary measure, when the conditions calling for it did not exist. The pendulum of thought and practice has now swung in the opposite direction, and many surgeons are at present inclined to award a very minor position to drainage in their abdominal technique, preferring to trust to

the natural drainage of the peritoneum, rather than to artificial measures. Such wide divergences of opinion upon a point that may well be considered fundamental cannot rest upon common data, but must be based upon an individual conception of facts, and their clinical application.

It cannot however be doubted that more uniformity of practice in the matter of draining the abdomen than at present exists, is attainable, and while the factor of personal experience will always enter into the equation, and give rise to differences of practice, a basis of procedure is possible that will equally serve those who close the abdominal cavity, and those who drain it. The common foundation upon which to build our technique will be the physiology of the peritoneum, for the manner in which it performs its function must furnish the most trustworthy guide and indication for treatment, in both health and disease.

It is worthy of note, that in the majority of pelvic and abdominal cases operated on, the peritoneum is not diseased, a very large proportion of the laparotomies performed being for the treatment, or removal of conditions that are entirely extra-peritoneal, the serous membrane meanwhile being only stimulated to an inhibitory action that is in excess of the usual. Therefore the treatment of the peritoneum in such cases will follow the lines of physiology, for we are dealing with a healthy serous membrane.

The peritoneum covers an area about equal to the surface of the body, and in common with other serous membranes its chief function is to reduce to a minimum, friction between the organs and parts it covers. This is accomplished by means of a very small quantity of fluid that circulates between the opposed layers of the peritoneum, and merely keeps them apart. The function cannot be performed if the membrane is dry, for in the presence of dessication pathological processes at once set in, which though salutary in shutting off infected regions, must nevertheless be ranked as pathological.

We thus reach a *first indication for treatment* of the peritoneum, that it must not be kept dry unless we wish to promote adhesions between its folds.

The normal quantity of fluid in the peritoneal cavity is maintained by means of a system of openings—stomata—in the endothelial lining, which lead directly in to the serous, and sub-serous lymph spaces, thus establishing direct communication

between the peritoneum and the lymphatic system. Through these stomata any surplus of fluid that may be present, is absorbed and taken up into the lymph stream, and eventually empties into the receptaculum chyli. We thus find an essential part of the function of the peritoneum that serves as a *second indication for treatment; a system of natural drainage* by means of which the quantity of fluid in the serous sac is regulated.

The arrangement of the openings in the endothelial covering of the peritoneum through which absorption takes place has an important bearing upon the question of drainage, for not only are they more numerous in certain regions of the membrane, but in number and activity they are in excess of physiological requirement, being capable under conditions that favor excitement, of absorbing from three to four per cent. of the weight of the body in an hour, and are also able to take up blood, pus, and other fluids foreign to the peritoneal cavity, and will even admit bodies twice the size of the red blood corpuscles. It is probable that some of the spots having the appearance of stomata, especially those situated in the enteric peritoneum, where open mouths can seldom be demonstrated, are really not such, being blind lacuna, covered throughout with endothelial cells, and having no communication with the lymphatic channels. In these pits the hyaline cells of the peritoneal fluid, with their attached microbes, rest, and are through stagnation, subjected to the phagocytosis of the leucocyte cells, to a degree that cannot occur in the circulating fluid of the peritoneum.

The stomata of the peritoneum are not distributed equally over all parts of the serous surfaces, appearing more numerous in regions where natural muscular action, or the motion of the organs assists in the mechanical drawing in, and passing on, of fluids. Thus in the region of the pillars of the diaphragm, the pumping action of which favors absorption, the openings in the peritoneum appear in the largest numbers. The covering of the small intestines, the constant motion of which rapidly brings all matters free in the peritoneal cavity in contact with their walls, possesses few open stomata, but numerous endothelial pits, which act, as we have seen, as phagocytic centers.

On the other hand the colonic peritoneum is entirely free from stomata, and the pelvic peritoneum is poor in both stomata, and large lymph trunks. This anatomical arrangement is sig-

nificant in view of the mortality that belongs to operations on organs in the region of the diaphragm, in contrast with operations on the pelvic organs. Absorption being more active in the superior folds of the peritoneum, in the presence of microbic invasion, operations involving the upper abdomen will be attended with a corresponding exposure to septic infection.

Open stomata have not been demonstrated in the endothelial covering of the mesogastrium (omentum), but numerous blind lacuna exist similar to those found in the small intestines, that fill an important office in peritoneal pathology. In health the chief function of the mesogastrium seems to be to protect the underneath viscera, but when irritated, as in even slight degrees of peritonitis, its peritoneal covering develops a sticky quality which attracts the cells of the peritoneal fluid, and the micro-organisms that are attached to them. Lodging in the lacuna, such cells become exposed to the processes of phagocytosis in an especial manner. Though a considerable portion of the lymph stream from the peritoneum to the middle mediasitnum passes by way of the omentum, it is not probable that any actual absorption takes place, the just claim that the mesogastrium is a peritoneal protector resting upon the harborage the endothelial lacuna afford pathological micro-organisms, and the opportunities thus existing for their digestion.

In this action of a portion of the peritoneum we find a *third indication* that bears directly upon the question of drainage, *viz.*, that under certain conditions phagocytism is developed in the mesogastrium to such an extent as to be regarded as a certain protection against the disastrous effects of bacterial invasion.

The behavior of the peritoneum when subjected to injury is especially concerned with the extent to which drainage of the abdomen can be carried. Following hyperaemia, and this refers to chemical, bacterial, or mechanical action, the peritoneum loses its pearly and glistening surface, owing to the removal of the endothelial cells by the exudate that takes place beneath them. Eventually, in the regions corresponding to the most intense hyperaemia, complete desquamation of the endothelia takes place, leaving the underlying interstitial spaces and lymph channels exposed. On this surface is quickly spread a soft elastic substance, containing albumen, flakes of lymph, cells and nuclei. This exudate not only precedes, but invites adhesions between the contiguous surfaces. As long

as the endothelial layer remains intact adhesions cannot take place, for the surfaces are bathed with their own mucous secretion, but as soon as this protective covering is removed, cellular changes are set in motion that result in an abundant adhesive exudate being thrown out.

Thus adhesions are formed between coils of intestines, or wherever denuded peritoneal surfaces lie in contact, and areas of peritoneum are rapidly closed to the general serous cavity. We are now in possession of a *fourth indication* that will influence our use of drainage of the abdomen—the tendency of peritoneal surfaces under certain well defined conditions, to contract adhesions with each other.

From what we have learned of the physiology of the peritoneum, and its behavior under the conditions that call for drainage of the abdomen, it is evident that we can avail ourselves of natural drainage, that is absorption by means of the lymph channels, in only a limited number of cases. Up to a certain point—a nice question for us to decide, is when that point is reached—the peritoneum, that is, its lymphatics, can take up, and render harmless, bacteria that have been introduced into the cavity, but in the majority of cases in which we desire to drain the peritoneum it will be our object rather to prevent absorption by means of the stomata, to place obstacles in the way of their functional activity, and to remove artificially the pathological micro-organisms, or their resulting toxins. In this endeavor nature renders assistance, for in the presence of irritation the endothelial cells of the lymph channels swell, and the stomata are closed either by this means, or by the formation of thrombi. Lymphangitis, which is the pathological description of peritonitis, therefore acts as a barrier against the septic invasion of the system, by closing the avenues of absorption. Natural drainage is available in the absence of pathological matter, and is effective, only when the organs move freely upon each other, and are not bound together by adhesions. The lymphatics of the diaphragm may be trusted to take care of almost any quantity of sterile fluid, even though that is composed largely of blood, but the natural function unaided, cannot be safely trusted when pathological micro-organisms are present.

From the nature of the pathology that attends the necessity for abdominal drainage, hyperaemia, and congestion of the peritoneum, with consequent denudation of the endothelial cov-

ering, the possibility of maintaining drainage of the general peritoneal cavity is out of the question, for not only will the local pathology result in shutting off areas of peritoneum, but the effect of any mechanical means taken to induce artificial drainage, will be exerted in the same direction, and within a few hours after placing the drainage tube or gauze, the general peritoneal sac is completely closed, and only the very limited region immediately surrounding the foreign body communicates with it, or with the surface of the abdomen. Artificial drainage, therefore, of the general peritoneal cavity being impossible to maintain, our use of this valuable aid to abdominal surgery will be confined chiefly to draining certain definite regions, and special foci of infection.

The method of accomplishing this will vary with the experience of the operator, and his conception of the existing conditions, and the method by which they can be overcome; certain general principles, however, underlie all methods of draining the peritoneal cavity. These have already been shown to rest upon the physiology of the peritoneum.

Before discussing the methods of drainage, it will be well to endeavor to differentiate between the cases that require to be drained, and those that do not, between those that we can safely leave to the natural function of the peritoneum, and those that require artificial assistance.

The provision of the peritoneum for absorption is apparently in excess of physiological requirements, and within certain limits the mesogastrium exercises a power of phagocytosis upon the bacteria that invade the abdomen. Provided, therefore, the asepsis is satisfactory, we may, though there is considerable oozing from denuded surfaces, rely upon the lymphatics of the peritoneum, and close the abdomen without drainage. To what extent we should trust to the phagocytosis of the peritoneal fluid, and the mesogastrium, in even mild forms of infection, remains a matter of doubt with some surgeons. From both of these sources assistance is derived in septic intoxication, but unless I am confident that I have thoroughly cleansed the peritoneum—in a manner to be hereafter described—and from the very nature of the case, such confidence is difficult to establish, I prefer to drain the infected region, and provide a vent for any noxious matter that may collect.

If there is general infection, and the inflammation is not sufficiently active to close the lymph channels, a dangerous de-

gree of absorption will take place through the diaphragmatic lymphatics, the pelvic stomata and lymphatics being obstructed with thrombi much earlier, and with a lesser degree of inflammation than those of the upper region of the abdomen. It will be our object, therefore, in the presence of general peritonitis, and all peritonitis save that which follows mechanical injury as a natural reparative process, is due to the presence of micro-organisms, to avail ourselves of the differences in function between the two divisions of the peritoneum, and place the patient in a position that will reduce absorption to a minimum, and drain away from the diaphragm by elevating the chest, and depressing the pelvis, (Fowler's position), quite the opposite to that we adopt when we wish to hasten absorption through the peritoneal stomata, as when flushing the abdomen for shock.

In connection with the position of the patient after a laparotomy, I am convinced that there exists an unreasonable prejudice against early voluntary movements, and against allowing a patient to assume the position that affords the most comfort, and therefore, rest. This may not be at all in accordance with our ideas of what should be comfortable, but the patient's point of view is the one for us to consider. There is no reason, unless the heart is weak, or the stomach unduly irritable, that patients should not be allowed to sit up in bed within the first few days after an abdominal operation if that position is the most comfortable, even when not assumed for the purpose of assisting drainage into the pelvis. Any change of position favors movements of the abdominal organs, and assists their function, hence goes far towards restoring the activity of the intestinal canal, and preventing paresis.

Drainage away from the diaphragm will be also favored by irrigation of the abdominal cavity, for the intestines are thus for a time floated, and adhesions between them prevented, but the advisability of flushing the peritoneum when pus is present, is open to the very serious objection, that by so doing the infected material may be carried to hitherto healthy regions, and forced where it would not otherwise have gone. But the method of irrigating will in a great measure overcome this danger. Irrigation, and this, not flushing, is the method of election when we wish to cleanse the abdomen, must be thorough to accomplish the best results, with the least risk of spreading the infected area. It is better not to make any at-

tempt to cleanse the peritoneum, than to rest contented with less than an assurance that every pocket, and every part has been reached and washed clean. The manipulation must be conducted with the utmost gentleness, else the endothelial covering is liable to be removed.

For purposes of cleansing the peritoneum, the practice of raising the edges of the wound, and pouring the irrigating fluid into the abdomen—flushing—is, in the presence of sepsis, entirely ineffective. The solution will not reach the deep, or remote parts, especially the region of the diaphragm, and the return flow cannot be trusted to remove septic materials. The renal fossae are very prone to be lodging places for infection, and these cannot with certainty be washed by flushing the abdomen. Flushing is especially useful when we wish to encourage absorption, but is of little use, and I believe really dangerous, in septic peritonitis.

I prefer a large irrigating tube that can be carried to every part of the cavity. The pistol-shaped ovariectomy trocar of Lawson Tait I have found a useful instrument. It is provided with a blunt, wedge-shaped point, that can be insinuated between organs with a minimum risk of injury. It has an eye on either side of the point, and carries a stream, the force of which is easily regulated by the height of the supply cistern.

A mental picture of the anatomy of the abdomen, especially of the peritoneal folds that form the mesentery, is absolutely essential for thorough and successful cleansing. It is not sufficient to merely pour a sterile fluid through the abdominal wound, and change the position by external manipulation of the abdominal walls, or by shifting the patient from side to side. Nor will it serve any useful purpose to introduce a trocar, and thrust it in various directions. The left forefinger as a guide, should gently displace the intestines, passing over their folds, to the posterior abdominal walls, to the region from which the mesentery is given off. In this manner every part of the serous sac can, and must be searched, and the irrigation continued until the fluid returns perfectly clear. The omentum should be carefully raised, and the region of the transverse meso-colon irrigated. This is an important part of the technique.

The quantity of water used for irrigating the abdomen is not a matter of much concern. It may be freely used, the sole object being to remove all noxious matter from the abdomen.

If the above method is followed, there is little danger of forcing septic matter further into the peritoneal sac, especially if the current is not allowed to flow until the point of the trocar reaches the region it is desired to cleanse. By this maneuver the stream is given a local direction, and is forced up and out of the abdomen along the side of the irrigating tube.

Drainage is best effected in the direction of gravity, but it is not always possible to establish this at the most dependent part of the abdomen, and we must sometimes avail ourselves of capillary attraction for the purpose.

With the object of draining the general abdominal cavity, a single piece of gauze is useless after the irrigating fluid has been disposed of. We must introduce gauze when, and in whatever direction we think matter is liable to collect, without regard to the cosmetic effect of the opening that it is necessary to make, for the efficiency of our system of drainage will bear a direct ratio to the thoroughness with which the infected points are connected with the surface. Elevation of the diaphragm, especially if the drainage is from the pelvis, will assist, but the drainage tract is soon closed, and all communication with the general peritoneal cavity shut off, hence multiple drainage points are necessary.

The phagocytosis which the omentum is known to exercise under the influence of peritoneal irritation, and the invasion of bacteria, places this fold of the peritoneum in a position of the first importance when we have to combat a septic abdomen, and though not strictly concerned, either with drainage, or the method of its application, it behooves us to regard the mesogastrium with respect, and to arrange it as a final step of the operation, in the position best calculated to exercise its powers of digestion upon the micro-organisms that are present in the peritoneal fluid. On more than one occasion, finding that its length would permit, I have anchored the omentum over a suppurating, or infected area, with results that have seemed to me to justify the procedure.

Thus far we have spoken more especially of general conditions that call for attempts at general drainage. The chief, and most successful field for drainage in abdominal surgery, however, is in local infection, and when in an absence of a necessity for treating the general peritoneum, there has been no attempt to do so. Any part of the abdomen, or pelvis may be reached, and mechanical drainage instituted, with the assur-

ance that the particular region is soon surrounded by adhesive inflammation, and that further infection from that source, cannot take place. Drainage of the abdomen thus becomes a local measure, that is best adapted to meet purely local conditions.

In common with other abdominal surgeons, I drain the peritoneum less frequently than I used to, feeling an increasing confidence, born of better knowledge, in the power of the serous membrane to absorb and digest noxious materials that may be introduced into the abdominal cavity. Certain conditions however always stand with me for drainage; I do not here speak of chronic peritonitis, or of peritoneal tuberculosis, but of a more acute abdominal pathology.

When pus is present, either general or local, or if infection has taken place during the operation, I always drain the infected region. This I feel to be the safer and more conservative course, for I cannot assure myself that all toxic matter has been removed with a pus tube, or a suppurating appendix, and I do not care to increase the operative risk by adding that of an inability of the peritoneum to dispose of such material.

I am quite aware that not all pus is attended with danger, and that some of the most virulent cases of peritonitis are not accompanied with suppuration. It is also an established fact that there is a wide difference in the virulence of bacteria, but I prefer to err, if err it is, on the safe side; to place a drain where the pus has its focus, and so provide a vent for the infectious matter.

Depending upon conditions that will develop at the time of the operation, the period during which drainage is to be maintained, will vary. In some cases the drainage tube may be removed the following day, and the sinus so formed allowed to close, at all events I feel that whatever infection may have remained is not closed in the abdomen, and that by this vent, I am kept aware of the processes going on at the seat of operation.

I sometimes employ what may be called "provisional drainage" when there is local inflammation, or even active hyperaemia of the peritoneum, my object being to deplete the vascular trunks, and thus assist them to regain their natural powers of contraction. By this means exudation beneath the endothelium is limited, and desquamation prevented. Drainage when introduced with this object in view must not be continued until the tract is perfectly dry. We are not dealing with suppura-

tion, or with septicaemia, and at the end of twenty-four hours the drain will have accomplished all of which it is capable, and should be removed, and the tract treated as an open wound.

The technique of drainage of the peritoneum is largely a matter of personal experience; my own practice is to avail myself of the vagina when possible, for I do not share the fear of infection that is frequently urged as an objection to this method. In women, the majority of laparotomies are performed for pelvic diseases, and the vagina is the mechanical drain for the pelvis, but drainage may be maintained from any other part of the abdomen, for the opening need not of necessity be that through which the manipulation has been carried on.

If the vagina has been properly prepared, and this should form a routine part of every gynecological operation, for we can never be sure of the conditions that we may meet, prior to opening the abdomen, there is no more reason that infection should arise from this source than from the abdomen, especially when we consider that the vagina is naturally aseptic. All vaginal wounds heal with remarkably little reaction, and usually by first intention. The vaginal hysterectomy wound, even with the open method of treatment, furnishes an uneventful history, and any operation that can be done through the vagina may confidently be expected to run a rapid convalescence. Therefore I drain through the vagina in preference to the supra-pubic route, if the pelvis is the region to be drained, and if the vagina is not the seat of disease. Usually the abdominal wound can be closed, but not until the vaginal drain is placed; it may, however, seem advisable in some extreme cases to connect the two openings. Certainly drainage will be more effective when atmospheric pressure is equalized through the superior opening.

Sometimes a rubber tube, a catheter fills the requirement, more frequently iodoform gauze, or better still, wicking, such as that in common use for spirit lamps, prepared in the same manner as iodoform gauze, either alone, or in the form of a cigarette, is introduced to the region required, and the end brought into the vagina. Against this iodoform gauze is lightly packed. After twenty-four hours the drainage tract is closed by adhesions, and if the character and quantity of the discharge require, a vaginal douche can be freely given without fear of forcing the discharge back into the abdomen.

If the vagina is not available for drainage, and it does not seem necessary to make counter openings to profit by gravity, I prefer capillary drainage without a tube, save possibly a cigarette. I have learned to regard with considerable uneasiness a drainage tube in the median line, and consider it fortunate that they are passing into disuse. They seem to me to invite infection from without, for the mechanical reason that the pumping action of the abdominal viscera and muscles, have a tendency to draw in the germ laden air.

I use iodoform gauze, 5 per cent., for I have found no sufficient substitute. In this strength there is slight danger of inducing iodoformism. I pass strips of gauze, the ends of which should be turned in to avoid fraying, in any direction and number that seem necessary. Light packing is advisable, and the strip of gauze should not be doubled upon itself, else the threads do not run parallel with each other, an essential precaution to insure the capillary attraction upon which this system of drainage depends for its efficiency.

Gauze so used for drainage need not be disturbed for several days, and upon the method of its removal will depend in a great measure the future history of the sinus. Unless the drain reaches a sloughing surface, which will require prolonged drainage, and frequent renewal of the packing, the sinus may be allowed to heal behind the gauze. This will be accomplished by shortening the gauze a little at each dressing, the sinus meanwhile being irrigated with carbolic acid. This treatment should consume from one to two weeks, but if after all the gauze has been removed a sinus remains, a few applications of 95 per cent. carbolic acid to the granulating surface, will usually be sufficient to close the wound.

Summary:

1st.—There is a system of natural peritoneal drainage, more active in the region of the diaphragm than in the pelvis. This system, however, cannot be relied upon in the presence of septic infection.

2nd.—The mesogastrium possesses distinct powers of phagocytism, which assist in destroying septic organisms that may gain entrance to the peritoneal cavity.

3d.—Irritation of the peritoneum results in denudation of its endothelial covering, exposing the underlying interstitial tissue. On this soon forms a fibrous exudate, which establishes adhesions between peritoneal surfaces.

4th.—Adhesions so formed interfere with the free passage of fluids between the abdominal and pelvic organs, and form pockets that do not communicate with the general peritoneal cavity.

5th.—While adhesions prevent the diffusion of septic matter, they also make general drainage impossible, for they form rapidly, and soon shut off the peritoneal cavity from the drainage area.

6th.—From this it follows that the chief field for drainage in abdominal surgery is in the presence of local infection, when the system of drainage can be carried directly to the infected part.

7th.—In the presence of general infection, as the entire peritoneal sac cannot be drained, it is necessary to avail ourselves of position, directing the peritoneal current away from the diaphragm into the pelvis, and to convert the abdomen into multiple drainage centers, by carrying artificial drains in various directions between the abdominal viscera.

THE COPPERS.

BY P. W. SHEDD, M. D., NEW YORK.

GRAUVOGL transposed Hahnemann's miasmatic terminology into chemical nomenclature by using the terms carbo-nitrogenoid (psora), oxygenoid (syphilis), hydrogenoid (sycosis). This is a gain for the hypercritical who sniff at "psora," but does not affect the inductive processes of homœopathic prescribing.

The carbo-nitrogenoid constitution, according to Grauvogl, is one in which oxygen is deficient, and because of non-oxidation and sequent excretion, carbon and nitrogen accumulate and we have an unbalanced organism, diseased or inviting disease. Remedies which, chemically speaking, eject carbon and nitrogen and take up oxygen or transmit oxygen or stimulate oxidation are therefore adapted to the carbo-nitrogenoid constitution, and pre-eminently suitable are Cuprum, Phosphorus, Sulphur, Camphor, Hepar, Sulphuric acid, alkali-sulphates, Mercury, Aurum, Argentum, Plumbum, Platinum, ethereal oils, Terebinth, Rhus, Dulcamara, Chamamilla, Lycopodium, Bovista, Belladonna, Nux Vomica, Digitalis, Hyoscyamus,

Opium, Lobelia (Grauvogl), which is a not inaccurate copy of the old "antipsoric" list. What's in a name? as the bard of Avon used to remark when cornered.

However, carbo-nitrogenoid is a serviceable term and not to be despised; psora also serves well as a technical expression. Hahnemann is blameworthy in neglecting to provide himself with a microscope of 1000 diameters, a few aniline stains, and some of the more delicate chemical procedures now in vogue, although it may be that the bacillus tuberculosis is not the cause of "psora," but rather a diagnostic point. Bacteria do not grow except in a suitable medium. Had Hahnemann invested also in an automobile he might have covered a wider field of practice.

Copper and its best proved salts, the acetate, arsenite, carbonate, sulphate are reckoned among the carbo-nitrogenoid or psoric remedies.

Copper, like Sulphur, is a house-cleaning remedy. It starts in the secret recesses of the organism and throws out refuse and disease. But Sulphur itches, burns, hangs out epidermal signs of its disorders, bends beneath the burden of its sins, is slothfully miserable but irritable, and addicted to boils; while Cuprum throws a localized or general fit; its disorder is intangible and neural; its nervous discharges go off by hair-triggers; and its vaso-constrictors close in death-like spasms, leaving the surface cold and blue, cold sweat and prostration telling of the enormous neural tension.

Wherever nerve runs to muscle, voluntary, involuntary, or cardiac, there Cuprum develops its tonic-clonic action. In the mental sphere we have melancholy with attacks—cramp-like—of extreme anguish; the mind is cramped to fixed ideas; convulsive laughter. Pharynx, larynx, esophagus, stomach, abdomen, pelvis are full of spasms, sharp tensive pains; epilepsy (thumbs turned in), chorea, angina pectoris, convulsions;—the patron saint of the Cuprum patient is St. Vitus, and to him he offers up a convulsive incense, and his convulsions are followed by paralysis.

Cuprum is malicious, spiteful, ill-humored. The milk of human kindness takes on verdigris in the Cuprum patient.

Convulsions or chorea, epilepsy, from fright or fear may call as loudly for Cuprum as for Opium (which antidotes copper).

When children cling to the nurse, shrinking as if affrighted

from every one else. Cuprum may pacify where Stramonium fails.

A verdigris diarrhoea points copperward; abdominal cramps as if a knife were driven to the spine whose edge cuts on the least motion, and he dare not, cannot move, (*Rumex*, trans-fixed, but able and daring to move); patients weak and nervous from overwork (*Calearea carbonica*); excruciating after-pains in women who have borne many children; repeated relapses from defective reaction, are Cuprum keynotes.

Cuprum aceticum presents marked copper characteristics. cramps, convulsions, gripes, paralysis are present, but the acetic element brings in other tissues than the neural. In the stomach there is constant nausea, frequent violent vomiting, with diarrhoea, painful distension, *inflammation* of the stomach. There is copious painful blackish diarrhoea, sometimes bloody, with tenesmus and weakness. In phthisis, where Cuprum would be rarely used, Cuprum aceticum may be indicated, the acetic component leading to emaciation, night-sweat, diarrhoea; here, as in the stomach it tends to greater tissue changes though still accompanied by the paroxysms and coppery eructations of Cuprum.

Peculiar symptoms of the acetate; constant protrusion and retraction of the tongue; epileptic aura beginning in the knees; its attacks are sudden, but inclined to periodicity, while Cuprum metallicum is ready to go off at the slightest provocation. In cramps, convulsions in young subjects the acetate may serve better than the metal.

Cuprum arsenicosum is a remedy of self-evident power. The arsenic tends to locate or emphasize its action in the digestive tract; the pains are not alone crampy but *burning*; there is thirst but a few mouthfuls satisfy, and the thirst seems due to great dryness of the mouth. The copper component, however, is equally prominent, and the spasmodic neuralgic crampy pains are excruciating.

Intermittent cold, clammy sweat is peculiar to this remedy.

The heart is more affected than in Cuprum—a choreic heart beating now feebly, now violently, always irregularly during the spasm, and in the intervals exhibiting a normal action.

The drug has been used successfully in intestinal catarrh of infants, with great emaciation, distended abdomen, legs drawn up, thin green or yellowish-green diarrhoea after every drink, tenderness of the gastric region, nausea and vomit of bile-green water.

In old syphilis there is intolerance of copper (material dosage). The arsenite, 1-3200 gr. is prescribed in the navy in these cases, and is usually ill-borne; its action here is peculiar to syphilis, and should serve diagnostically. Potentized it would find its place as a curative agent when indicated.

Cuprum carbonicum is known chiefly through its toxic action. Craziness, where he screams like a child, full, quick, strong pulse, red inflamed eyes, incoherency, paroxysms frequently returning; also frequent attacks of epilepsy. In the digestive tract nausea, vomit, tenesmus, colic, with subsequent trembling and profuse sweat, constant diarrhœa, or discharge of blood.

Cuprum sulphuricum has been insufficiently proved. Its emetic action, diarrhœa followed by obstinate constipation, are indefinite indications.

Cuprum ammoniacale (ammoniacal sulphate of copper); *Orichalcum* or brass (copper and zinc); *Aes campanarium* or bell-metal (copper, zinc and lead); *Aes* or bronze (copper and zinc); and an alloy of copper, sulphur, mercury and paeonia, are empirical remedies whose gross action constitutes poor pathogenesis.

THE DIAGNOSIS AND TREATMENT OF ACUTE ANTERIOR URETHRITIS

BY MAX ROEDMANN, M. D., PHILADELPHIA, PA.

BEFORE commencing the treatment of a patient presenting himself with a urethral discharge, it is necessary to make an exact diagnosis of the condition present. To ascertain positively whether the case is one of simple or gonorrhœal urethritis, a minute drop of the pus may be spread between two cover glasses, dried, fixed and stained with one of the anilin dyes. Examined under a 1-12 inch oil-immersion lens, gonococci, if present, can be readily seen as diplococci, coffee-bean shaped, their concave surfaces opposed to each other, occurring usually in groups both within and without the pus and epithelial cells. Having thus by means of the microscope, ascertained that the inflammation of the urethra is due to an infection by gonococci, it behooves us to find out whether the anterior

urethra alone is involved or whether there is a co-existing posterior involvement.

Have the patient urinate into two glasses, the first of which is to contain about three ounces of urine. If the contents of the first glass, containing the washings of the entire urethra, be cloudy with pus, and the second clear, we may presume the condition to be one of anterior urethritis. The second glass containing perfectly clear urine does not, however, exclude the possibility of a posterior involvement, since the catarrhal process in the posterior urethra may be so slight as not to allow the discharge to flow back into the bladder, mix with the urine, and so cause a cloudiness of the urine in the second glass. In order now, to be absolutely positive of the diagnosis, thoroughly wash out, by means of the Valentine irrigator, or a small soft rubber catheter, the entire anterior urethra up to the cut-off muscle BEFORE the patient has voided his urine. Then have him urinate into a glass, and if the first urinary gush is still cloudy, the diagnosis of posterior urethritis becomes positive; if there be no cloudiness of the urine the anterior urethra alone is affected.

The treatment of an attack of acute anterior gonorrhoeal urethritis may be divided into two classes, "a," the methodic; "b," the local.

THE METHODIC TREATMENT.

CLEANLINESS.—The parts are to be washed frequently with water and soap. The discharge should be kept from smearing the underwear, either by a penis suspensory bag, the bottom of which is to be supplied with renewed portions of absorbent cotton, or the glans penis may be thrust through a slit in the center of a square piece of gauze long enough to protrude for about an inch in front of the meatal orifice, until the slit lies snugly behind the corona glandis.

The patient should be cautioned to wash his hands carefully after handling the penis, to prevent infection of the eyes.

It is advisable that the patient wear a suspensory bandage as a preventative of epididymitis and also to protect the testicle from injury.

DIET.—All alcoholic and effervescent beverages, strong black coffee, spices, acids, condiments, sauces, tomatoes, asparagus, indigestible and rich foods, must be interdicted. Milk, vegetables, bread, fish and a little lean meat make the best diet.

REST.—While it is not possible to put every case of acute urethritis to bed, as much physical repose as possible, is desirable.

SEXUAL HYGIENE.—All sexual excitement caused by association with women, erotic thoughts, racy books and pictures, etc., must be avoided.

DILUENTS.—The patient should be instructed to drink freely of plain hydrant water, the bland natural waters, milk and buttermilk, for they dilute the naturally acid and irritating urine.

INTERNAL TREATMENT.—If the urine be dense and highly acid, an alkali, such as Bicarbonate of Soda in 5-10 grain doses t. i. d., may be prescribed.

For the early inflammatory symptoms of gonorrhoeal urethritis Aconite, Gelsemium, or Atrophine may be prescribed, upon indication.

Profuse purulent discharge with burning on urination may suggest *Cannabis sativa*, *Cannabis Indica*, *Merc. cor.*, *Pulsatilla*, *Copaiba*, etc.

Chordee, if present, may be relieved by Camphor, Contharis, Lupulin or Morphine injected into the perineum at bed-time.

The bowels should be kept open by a cathartic if necessary.

LOCAL TREATMENT.

As soon as the diagnosis of acute anterior urethritis is established, irrigations of the anterior urethra with a solution of Permanganate of Potassium 1 to 3000 by means of the Valentine irrigator should be commenced. By this manner of treatment the discharge is almost always under control in four to six days, dysuria and chordee abolished, and the duration of an attack is greatly lessened. Used with care and judgment the irrigation method is the best weapon in the hands of the genito-urinary surgeon in combating an acute attack of gonorrhoeal urethritis, but in the hands of the novice, and carelessly used, it is a dangerous instrument indeed.

Great care must be taken not to drive, by faulty technique, the discharge beyond the cut-off muscle and into the posterior urethra.

The patient should apply for treatment twice daily for the first week, once daily after that, until the urine becomes clear,

when the intervals between treatments may be lengthened to two or three days.

After the urine has been clear with shreds for a few days, the shreds indicating that still some lacunae and follicles are affected, a full sized sound should be passed every third or fourth day; this expresses the contents of the lacunae and follicles into the urethral canal. After the sounding the urethra may either be irrigated with a Potassium Permanganate solution, or a solution of Nitrate of Silver in the strength of 1-5 grains to the ounce of water may be instilled along the entire anterior urethra by means of the Keyes-Ultzmann syringe.

If the case should not progress as favorably as expected, an inspection of the urethra should be made through the urethroscope, and if there be any eroded spots within the urethra, they may be touched up by means of an applicator through the urethroscopic tube with a 2 per cent. solution of Nitrate of Silver; any abnormal growths, such as urethral stricture, papilloma, etc., must, of course, be removed.

In uncomplicated cases of acute anterior urethritis a cure may be expected in three or four weeks, if the Irrigation method has been adopted.

Against the advantages of the treatment by irrigation may be set the trouble and expense of the treatment to the patient. In such cases, where the patient can only afford one or two visits per week, I advise that internal treatment alone be relied upon until after the stage of decline is reached, when one of the following injections may be prescribed.

℞	Kali Permang.	gr. v
	Aquae Dest.	℥ viii
	M. Sig: Inject night and morning.	
℞	Kali Permang.	gr. iv
	Zinci Sulph	gr. xv
	Aquae Dest.	℥ vi
	M. Sig: Inject.	
℞	Zinci Sulph	gr. xv
	Plumbi Acetatis	gr. xxx
	Aquae Dest.	℥ vi
	M. Sig: Inject.	

The syringe to be used should be all glass, have a blunt nozzle, and be of a one-half ounce capacity. The patient should be instructed to always urinate before each injection, to thor-

oughly cleanse the glans penis and the nozzle of the syringe, to force the solution into the urethra very slowly, and use only sufficient fluid to distend the anterior urethra moderately. The fluid should be retained for about five minutes by keeping the nozzle of the syringe against the meatus, or by pressure of thumb and finger as the syringe is being withdrawn.

In most cases a cure cannot be expected from the injections alone, and soundings and urethroscopy should be practiced as described above.

No case should be dismissed as cured until the urine has become absolutely clear and free from shreds, and not until repeated microscopic examinations of the urinary sediments have revealed the absence of gonococci.

It is well to keep the case under observation for about two weeks after all treatment has been discontinued, and if at the expiration of that two weeks there has been no indication of a recurrence of any of the symptoms of urethritis, the case may be safely dismissed as cured.

TRAUMATIC CATARACT FROM RUPTURE OF THE POSTERIOR CRYSTALLOID.—The author reports a case of rupture of the posterior capsule in a boy 14 years of age, who was struck on his right eye with some rubbish. The eye became slightly inflamed, the sight was not affected, and in a few days the patient returned to his occupation entirely well. Two months after the accident the vision began to decline and progressively get worse, so that at the end of a month he could scarcely count fingers at one meter. The examination revealed below and behind the lens a floating white substance in the vitreous, for which a diagnosis of rupture of the posterior capsule was made. Within another month quite all the lens substance had been absorbed and vision had improved to 1-6 with + 13 D. It still increased and finally reached 2-3 with the same correction. Lateral illumination then showed that the anterior capsule was intact and an irregular opening was present in the posterior crystalloid, from which the soft substance of the lens had escaped into the vitreous. The affection is a rare one, if we judge from the few cases which have been reported. The mechanism of production is as follows: The traumatic action on the cornea depresses this membrane and consequently decreases the antero-posterior diameter of the bulb and increases proportionately the transversal one. Under this action, if the zonula does not give way, the increased tension will be resented by the crystalloid, yielding either on its anterior or posterior surface. He explains the little disturbance after the injury and the rapid failing vision at the end of two months by supposing that the rent in the capsule immediately after the accident healed up, and then burst open with the rapid formation of opacities in the lens substance.—Chiari. *Annals of Ophthalm.*

WILLIAM SPENCER, M. D.

EDITORIAL.

THE ONE HUNDRED AND FIFTIETH ANNIVERSARY OF THE
BIRTH OF HAHNEMANN.

ON the eleventh of April, one hundred and fifty years will have passed since the birth of Samuel Hahnemann, at Meissen, Germany. It would be superfluous for us to enter into a detailed account of his life and his work, as our readers are no doubt already familiar with the important events in his history. As physicians of to-day, we are not so much concerned as to where or when he lived as we are to know what he accomplished.

During the earlier years of his professional career, Hahnemann made important contributions to chemistry and pharmacy, but the crowning work of his life was the promulgation and development of a system of medical therapeutics based on the principle "*similia similibus curentur*." For this contribution to medical science he has been bitterly denounced by some and unstintingly praised by others. We do not propose at the present time to chronicle the long and bitter contest between the supporters and opponents of Hahnemann and Homœopathy. Dr. Heysinger has reviewed this subject in a thorough and masterly manner in the present issue of the *HAHNEMANNIAN MONTHLY*, in an article entitled "Hahnemann's Place in History."

We can best judge the effect of Hahnemann's work and teachings on the development of medical practice by comparing the condition of medicine in his day with the present state of medical science. Any fair minded observer who will make such a comparative study must concede that Hahnemann was right, at least in his condemnation of the cherished methods of traditional medicine, for we have seen them abandoned one by one until scarcely a relic of the old system of medical practice remains. Hahnemann's work had a positive, as well as a negative influence. He demonstrated the curative power of small doses of drugs; that generally speaking, a single remedy has

a more beneficial therapeutic effect than several remedies used in combination; that the proving of drugs on healthy human beings is the most accurate method of ascertaining the effect of drugs on the human economy; that the principle of "similia" is a valuable method of selecting a drug for the cure of disease; that trituration and minute subdivision increase the dynamic power (modern investigators prefer to call it the electrical energy) of drug agents. All of these propositions which are now generally recognized to be true, were advanced and established as a result of Hahnemann's investigations and teachings, and the time is fast approaching when the attitude of scientific men of the traditional school of medicine toward Homœopathy must change and Homœopathy be allowed its proper place in medicine.

The treatment which Hahnemann received from the medical men of his time, who regarded him only as the promulgator of a system of medicine antagonistic to their traditions and beliefs, was both unscientific and irrational. We do not contend that either Hahnemann or his doctrines were infallible. We regret that his mind was somewhat tinged with the mysticism of his age; we regret that the chaotic state of pathology in his day led him to form false ideas of the nature of some diseases, and we regret that goaded by the personal insults and public denunciations of his professional contemporaries, he replied in terms that were sometimes undignified and bitter. Yet with these faults, which he possessed in common with the rest of mankind, we do not hesitate to pronounce him the greatest therapeutic reformer of modern times, and a man to whom the medical profession and humanity owe the highest honor and respect.

A PROPOSED AMENDMENT OF THE MEDICAL LAWS OF PENNSYLVANIA.

SINCE the passage of the act establishing a State Board of Medical Examiners in Pennsylvania to provide for the examining and licensing of practitioners of medicine and surgery in this State, several defects in the law have developed. One of the serious defects in the present law is that it is ineffective in preventing unlicensed and incompetent persons from publicly practicing their arts on the sick. It is our understanding that the object of State regulation of the practice of medicine

and surgery is to provide that only persons who have shown that they have had the proper training and experience shall be permitted to treat the sick. We can see no possible excuse for a State law to regulate the practice of medicine and surgery unless it accomplishes the above mentioned purpose.

Another defect in the present law is the scant provision which it makes for reciprocity with medical examining boards of other states. Mistakes in the identification of the individual to be examined have occurred more than once under the present law, and unless a change is made further deceptions may occur.

To remedy these and other defects of the present law, an act has been submitted to the State legislature to amend it. The proposed amendments have received the sanction of the deans of the medical schools of the State, and the united support of representative men of the allopathic, homœopathic and eclectic schools of practice.

Section 1 of the proposed act provides to amend section 10 of the present act by inserting the following clause:

"On and after the first day of June, Anno Domini nineteen hundred and five, there shall be admitted to the examination in anatomy, physiology, chemistry, hygiene and materia medica such applicants as shall be certified as having studied medicine in a regularly incorporated, reputable medical school not less than two full years of at least eight months in two different calendar years, provided such candidates are of such moral character, have the requisite preliminary education as provided in section thirteen, and pay the fee of twenty-five dollars, and there shall be admitted to the final examinations in surgery, obstetrics, pathology, diagnosis, therapeutics and practice of medicine such applicants as shall be certified as having finished the full period of four years of study, and as having received the degree of medicine."

This provision will enable students of medicine to take their examinations in anatomy, physiology, chemistry, etc., at the end of their second year in college. This change will facilitate the work of the medical schools and will enable students to concentrate their attention during the last two years in college to the practical departments of medicine and surgery.

Section 3 of the proposed act provides to amend Section 13 of the present act by inserting the following words:

"Upon the completion of the regular four years' course and graduation from a reputable literary college having a four years

course, two years of which were devoted to scientific and biologic work in the college shall be accepted by the Medical Council of the State of Pennsylvania as an equivalent for the first year in a recognized reputable medical college, provided that the examinations of the first year of the said medical college have been successfully passed and accepted by the medical college as dealing adequately with Chemistry, Materia Medica, Physics, Toxicology, Physiology, Anatomy and the Biologic Sciences."

This will enable a student to take a bachelor's degree and a medical degree in seven years, and is a measure to be commended.

"And it is further provided that applicants examined by State Boards of Medical Examiners or State Boards of Health of other states, on the payment of a fee of twenty-five dollars to the Medical Council, and filing in the office of the Medical Council a copy of said license, certified by the affidavit of the President or Secretary of such Board showing also that the standard of requirements adopted by said Board of Examiners or State Board of Health is substantially the same as is provided by Sections 10, 11, 12 and 13 of this act, shall without further examination receive a license conferring on the holder thereof all the rights and privileges provided by sections 14 and 15 of this act."

Since most states now require a license from a medical examining board before a physician is permitted to practice medicine or surgery within their jurisdiction, practitioners of medicine have been subjected to much inconvenience and frequently to injustice when personal or other reasons have rendered it necessary for them to locate outside of the state in which they originally obtained their license. Many physicians who have had wide experience, and who are recognized to be competent men, have been refused the privilege of practicing in states to which they have moved, because of their inability to answer questions which are sometimes pedantic and necessarily a faulty test of their practical knowledge and skill. We believe that it is but fair and just to the profession that a liberal interstate reciprocity be encouraged with those states whose requirements are substantially the same as our own.

Section 3 of the proposed amendment further provides that "Candidates for license to practice medicine and surgery, or any of their branches in this State, to present their applications and undergo examination after the first day of January, A. D.

1910, shall be obliged to present to the Medical Council one of the following credentials satisfactory to the Council, covering their preliminary education prior to their beginning the study of medicine in some legally incorporated, reputable medical school, to wit: A diploma of graduation from a reputable college or university, granting the degree of bachelor of arts, bachelor of science or equivalent degree or diploma of graduation from an educational institution maintaining a four years' course of study, that is, a State Normal or High School, a seminary, an academy or college preparatory school, or a certificate of having passed examinations for admission to the freshman class of a reputable literary or scientific college or university, or a certificate of having passed an equivalent examination conducted by a certified examiner, approved by a State superintendent of public instruction, said certified examiner being privileged to accept credentials from reputable and recognized preliminary schools for any subjects included in the preliminary education."

This clause is intended to raise the standard of preliminary requirements.

Section 4 of the proposed law is inserted for the purpose of preventing unlicensed and incompetent persons from practicing medicine or surgery or any of their branches in Pennsylvania, and reads as follows:

"From and after the first day of March, A. D. 1905, no person shall enter upon the practice of medicine or surgery or any of their branches in the State of Pennsylvania unless he or she has complied with the provisions of this act. Any person violating any of the provisions of this act shall be guilty of a misdemeanor and upon conviction thereof in the Court of Quarter Sessions in the county wherein the offence shall have been committed shall pay a fine of not less than one hundred dollars nor more than five hundred dollars, and by imprisonment in the county jail for not less than thirty days nor more than ninety days for each offence, either or both at the discretion of the court."

We believe that the adoption of the amendments to the medical laws of Pennsylvania as set forth in the proposed act, will do much to remedy the faults of the old law, to raise the standard of medical education, and to effectually prevent unlicensed and incompetent persons from attempting to practice medicine or surgery in this State. If it will accomplish these ends, the new act will be a benefit both to the profession and to the public.

GLEANINGS.

A STUDY OF ACUTE HEMORRHAGIC ENCEPHALITIS (STAPHYLOCOCCUS PYOGENES AUREUS)—*Southard and Keen*.—Resume 1. The staphylococcus pyogenes aureus produces in the meninges and brain substances of man a type of inflammation in which hemorrhage is prominent.

The picture post-mortem in man varies from red softening or multiple ecchymosis and small abscess to frank and sometimes voluminous hemorrhage. The site of election for the hemorrhage lesions is the subcortical region, supplied by the long or medullary branches of the cortical vascular system.

The histological picture varies from diapedesis and slight leukocyte emigration to abscess and acutely destructive hemorrhage with phagocytosis. Collections of mononuclear cells, phagocytic for cells, and cell detritus often quite obscure the acute inflammatory appearance of the lesion.

Six fatal cases in man were examined, all but one were cases of general infection with the staphylococcus aureus.

A history of antecedent disease was a rule. The syndromes, which were chiefly of sudden onset and rapid course (three to fifteen days), were of pyæmic, meningitic, or cerebral type. The cases of slower course were the most plainly cerebral.

2. The staphylococcus pyogenes aureus produces in the brains of guinea-pigs an inflammatory process which tends to subside within a limited period (two weeks), and, as a rule, remains without clinical signs throughout.

No hemorrhages other than miliary perivascular ones were observed in a guinea-pig. The lesions are seldom grossly evident.

The cell pictures are of meningitis (discernible in six hours), ependymitis (twelve to fourteen hours), and exudation into the brain substance (twenty-four to forty-eight hours).

The four and five-day cases show numerous cells of the lymphocyte series as well as mononuclear cells phagocytic for exudative cells. Examples of such phagocytic cells have been found as early as twenty-four hours after inoculation.

The exudation into the meninges is discernible earlier, and its traces are demonstrable later, than are the processes in the ependyma and the encephalon; but the meningitis is never so extensive or striking a process as the encephalitis or the choroiditis.

In two weeks to a month there is little sign of the previous infection.

3. The staphylococcus pyogenes aureus, of the strains and in the doses experimentally used, produces in a guinea-pig a curable encephalitis that is a process which in logic is termed reversible. The same organism produced in our human cases extensive brain lesions which surely look as a group irreparable. Perhaps, however, there are in man also certain cases of encephalitis which reverse themselves, and which in their course are taxed with being "functional" diseases and furnish "functional" symptoms during and

after tissue repair.—*The American Journal of the Medical Sciences*, March, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE PARADOXICAL FLEXER REFLEX; ITS DIAGNOSTIC VALUE.—*A. Gordon* describes a reflex which, in his opinion, by its novelty and diagnostic value in organic diseases of the nervous system ranks alongside of exaggerated knee-jerks or the phenomenon of extension of the toes. He claims that it is of great value, particularly in those obscure cases in which other symptoms are vaguely manifested, also in those in which other diagnosis between organic and functional disease is doubtful. He says that in the latter case especially this new reflex renders great service and consequently may give an entirely different view in regard to the prognosis and treatment. Gordon cites one case among many others, in which the foregoing is well illustrated. He examined 30 cases of various organic diseases and for the purpose of control he examined several hundred normal diseases in which were about 50 cases of various nervous diseases in which the new reflex could not be expected. The reflex is elicited by pressing upon the flexors of the legs in a certain manner which must be followed strictly and for which the reader is referred to the original article. Gordon calls it paradoxical, as excitation of the flexors gives extension instead of flexion. The article also gives Gordon's view concerning the relationship of his reflex to other reflexes, particularly those which are manifestations of involvement of the motor tract.—*American Medicine*, December 5, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE CLASSIFICATION OF HYDROCEPHALUS—*Kraus*.—Various conditions have been described by different authors as examples of this disease, without, however, bearing definite relation to one another. There follows consequently a confusion as to the different forms and a misconception of the true relationship existing between them. He has attempted a classification based on the pathological standpoint in such a manner as to meet all the different views taken on this subject. Hydrocephalus may be either acute or chronic. The acute or inflammatory form may be either external, due to an inflammation of the meninges, or internal, due to inflammation of the ependyma. The chronic forms may be either congenital (developmental) or acquired (obstructive). Each of these is described. Cases of alcoholic pseudotabes are not so rare among women as to call for reports of cases except where unusual sequelae are present. The case reported by the author terminated in death through an intercurrent serous meningitis or acute internal hydrocephalus. The patient was a pronounced alcoholic and suddenly developed ataxic symptoms which grew gradually worse until she finally presented the type of paraplegia characteristic of alcoholic neuritis or false tabes. The mental symptoms were well marked, but there were no disturbances of the vesical or rectal reflexes until a few days before death, which occurred practically without symptoms or external evidence of dissolution.—*American Medicine*, October, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE ABSORPTION AND UTILIZATION OF PROTEIDS WITHOUT DIGESTION—*Rockwood*.—Certain writers have recently maintained that native proteids

can be readily absorbed and utilized by the organism without the intervention of proteolytic enzymes, provided they are introduced in soluble form. It has on the other hand, been recently assumed that the crystalline cleavage products of the proteids in the intestinal contents are absorbed and synthesized by the organism into the proteids peculiar to its tissues and fluids, that assimilation consists in the construction of amido-acids, diamido-acids, etc., into new molecules. A series of important experiments in this domain were performed with the following results; Vegetable proteids (Crystallized edestin from hemp-seed and excelsin from the Brazil-nut) slowly introduced in solution into the circulation of animals, can apparently be retained in the organism for the most part, even when the quantities introduced almost equal that of the globulins, normally present in the blood. When solution of vegetable proteids are injected too rapidly or in too great concentration, toxic symptoms, including an inhibition of the cardiac and respiratory activities may be observed especially in cats. The vegetable proteids soon disappear in considerable part when introduced into the peritoneal cavity. They do not appear in the urine. The unaltered proteids edestin and casein are absorbed to a very small extent, if at all from portions of the living small intestine in which the ordinary digestive processes are excluded as far as possible. On the other hand, the proteoses and peptones obtained by peptic digestion of these proteids readily disappear from the intestine under the same conditions. The typical vegetable proteids show no marked difference from those of animal origin in their relation to the processes of metabolism. It is not necessary to assume that the proteids are first completely broken down by the intestinal enzyme trypsin before they are absorbed, for casein (upon which trypsin can act) may remain unabsorbed.—*American Journal of Physiology*, December 1, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE PASSAGE OF FOODSTUFFS FROM THE STOMACH.—By means of the Roentgen rays, W. B. Cannon was able to study the time it takes the various foodstuffs, mixed with bismuth subnitrate, to pass from the stomach. Fats remain long in the stomach. The discharge of fats begins slowly and continues at nearly the same rate at which the fat leaves the small intestine by absorption and by passage into the large intestine. Consequently there is never any great accumulation of fat in the small intestine. Carbohydrate foods begin to leave the stomach soon after their ingestion. They pass out rapidly, and at the end of two hours reach a maxim amount in the small intestines about twice the maxim for proteids, and two and a half times the maxim for fats, both of which maxima are reached only at the end of four hours. The carbohydrates remain in the stomach only about half as long as proteids. These frequently do not leave the stomach at all during the first half hour. After two hours they accumulate in the small intestines to a degree only slightly greater than that reached by carbohydrate, an hour and a half earlier. Egg albumin is discharged from the stomach in about the carbohydrate speed. Doubling the amount of carbohydrate food increased the rapidity of the carbohydrate outgo from the stomach during the first two hours; whereas doubling the amount of the proteid food strikingly delays the initial discharge of proteid from the stomach. The

interval between feeding and the appearance of food in the large intestine is variable, but the mean for carbohydrate is about four hours, for proteids about six hours, and for fats about five hours.—*American Journal of Physiology*, December 1, 1904.

TYPHOIDAL INSANITY IN CHILDHOOD—WITH SOME NOTES AS TO ITS CHARACTER AND PROGNOSIS—Edsau.—This type of insanity, according to the facts expressed by medical authorities, has always been looked upon in a confused aspect as to its favorable outcome, and a few are willing to admit a permanency in only twenty per cent. of cases. Osler says that "Except for hemiplegia one need not worry about the outcome of a post-infectious cerebral disturbance of childhood, since all recover." It is true, however, that severe cases do not always recover. The literature of the subject has been searched with a view to finding out the outcome of typhoidal insanity when the condition occurs in childhood and where heredity is a factor. The classification that has been followed out includes mania, melancholia, dementia, paranoia and simple deliriums. The figures presented show 36 manias, 26 dementias, 6 melancholias, and 4 deliriums, 1 paranoia. There was a grand total of 69 cases, of these 43 recovered or 62.3, 23 or 33.3 per cent. remained insane, 4 per cent. died. Of the manias 29 recovered, 2 died and in 5 insanity persisted. To be sure these figures cannot be wholly relied upon and accepted as representing the actual conditions, and this is evident from many standpoints. The important points that are brought out by the study are the appreciable number of cases in which the insanity persists; that mania is but little more common than dementia; melancholia is much less common; and finally, that a great number of the deliriums do not get well. The dementias following typhoid fever are more common in childhood than in adults.

As to the frequency of insanity in childhood, Deroy says that it occurs once in 200 cases of fever. Mention is made of a case occurring in Saint Christopher's Hospital, and who during convalescence, had no control over his body functions and took no notice of anybody or anything in the ward. He showed absolutely no interest in the other children, and although he did not have the appearance of melancholia, he seemed to have lost memory, speech and most of the other faculties of a child of that age. This continued for nearly seven weeks and then he began gradually to recover, and in a few weeks was discharged well. This is an example of an acute dementia.

A case representing the commonest form of post typhoid mental confusion, melancholia and occasional maniacal outbreaks. The child presented signs of typhoid fever and passed through a very severe attack. The nervous symptoms were the most prominent through the attack and often she developed much rigidity which in every sense would suggest a possible meningitis. Fever had been expended for some time, but still she lay in bed moaning and calling for her mother, begging for food and continually fretting. She had, during the fever, the idea that her mother was dead. She had an enormous appetite and asked for food most of the time, although she was fed as often and as much as was possible. She had become very much wasted, and very weak. After a few days it was noticed that she was very much depressed in appearance and very quiet. A fearfulness seized

her suddenly and she became uncontrollable, and usually so upon the arrival of the doctor or the nurse or any sudden movement, and this fearfulness was accompanied by a sudden cry followed by a sharp, shrill cry. She was afraid of everybody, and thought that they wanted to do her some bodily injury. During periods of quietude or during conversation she would often break forth in a few lines of a song, at times tapping her feet on the floor and usually ending her song with a cry or wail.

Hallucinations were very frequent, the patient at times rushing to the door to meet some one who she said had come to see her. There were always present in the child marked religious emotions, for she recited many times over her prayers and often assumed an attitude of prayer, for she believed the angels were talking to her. She also has developed the idea of persecution, for she believed that the doctor was about to cut her throat with a penknife. There were periods following this in which she would cry out, "I am so unhappy," developing maniacal outbreaks in which she would tear the bed clothes and become very careless about her habits. She would fight violently when interfered with. After some little time she became less noisy and soon began to improve, from then on making complete recovery.

Treatment.—As a rule, institutional treatment does not apply to this case where the child remains depressed and homesick. There is no doubt that the treatment, when carried out at home is the best. This is more apt to be true of children than it is of adults.—*The American Journal of the Medical Science*, February, 1905.

WILLIAM F. BAKER, A. M., M. D.

A CASE OF AMAUROSIS PERIODICA FUGAX.—Dr. Wolffberg, of Breslau, Germany, reports the case of a physician of forty-eight years who one evening while sitting and reading the paper and, at the same time, smoking a very strong imported cigar, was seized with restlessness, his body broke out in a cold sweat, while a central scotoma appeared in the right eye; this lasted from one to two minutes, but reappeared in the same manner in five minutes again. There was no flickering before the eyes, neither was there headache. The patient abstained from smoking the following day, but the day after that, the second day, on taking up the habit, the attack reappeared, with redoubled violence. Externally the eye was wholly normal; the pupil reacted to light, but one symptom was striking: there was a velvet-like redness of the disc during the attack. The other disc was entirely intact. Treatment consisted in complete abstinence from alcohol and tobacco, after which there was no recurrence. The writer regarded the tobacco as only an incidental cause (*Gelegenheitsursache*), for if the eyes be overtaxed after eating heavy and indigestible food any intercurrent disturbing cause as emotional excitement, smoking a strong cigar, etc., may bring about such an attack.—*Berliner Klinische Wochenschrift*, No. 34, 1904.

FRANK H. PRITCHARD, M. D.

LATE HEART LESIONS FOLLOWING TONSILITIS.—Dr. Busquet has had opportunity during the last twelve years of observing seventeen cases of heart disease following an attack of ordinary tonsillitis in which the throat trouble was, in the majority of the cases, seemingly a benign affair. Whether the causative disease be pseudo-membranous or not but non-diphtheritic, the

primary affection pursues its course without giving rise to marked general or local disturbances. Complications would be lacking so that after a few days of illness, of rather malaise than actual illness, the patient would feel himself restored to health and resume his usual occupation, feeling apparently well. It would be only after several weeks when the tonsillitis would be forgotten that certain symptoms as dyspnoea and general lassitude would commence to distress him. The patient would feel "soft," his legs would lose their strength. Then more pronounced signs would appear: palpitation of the heart, attacks of dyspnoea and emaciation. Examination would most often reveal a mitral lesion. In short, endocarditis had been insidiously ingrafting itself upon the heart and running its course without being noticed.

The case to which the writer particularly refers is the more typical as the subject was wholly free from any pathological tendency. The heart lesion was accidentally discovered during an examination for a certificate of physical ability. Twenty months previously this man while serving with his regiment had had a mild attack of tonsillitis, with a swelling of the right tonsil, without either an exudate or an enlargement of the neighboring lymph-glands. There was but a little pain on swallowing and a slight fever for two days. A week after the attack he was entirely well. His antecedents personal as well as hereditary were excellent and he seemed to be very robust and in good health. Dr. Busquet, however, on examining his chest found the manifest signs of a valvular lesion, for the apex beat was depressed downwards and outwards, with an increased area of pericardial pulsation as well as a murmur at the base. While resting there was no functional disturbance and the patient was in no ways incommoded by his cardiac lesion. It was only after rapid running or prolonged exercise that he noticed that he was out of breath. The writer thinks that the tonsillitis was the primary disease and the cause of the heart lesion which was at first an endocarditis with its attendant changes in the valves; the tonsils were the doors of entrance of the germs, the blood-stream the intermediate link and the heart the second place of localization.—*La Semaine Medicale*, No. 34, 1904. (Several such cases have been reported of late years. There was an article in the *American Journal of Medical Sciences* a few years ago on this subject. The article on Rheumatism in Childhood in Albutt's System of Medicine refers to this cause of endocarditis and goes still further in saying that the heart should be watched after all rheumatic manifestations, all febrile diseases of childhood and even after a wry neck.)

FRANK H. PRITCHARD, M. D.

THE PROGNOSTIC AND DIAGNOSTIC VALUE OF FEVER IN APPENDICITIS.—Dr. Cheinisse finds that there are fewer advocates of immediate intervention in all cases of appendicitis for treatment has become more conservative and the various phases and particularities of cases are being studied. Hyperleucocytosis which was recently held to be a pathognomic sign is regarded of less importance. Recently, however, and especially in Germany, careful and systematic study of the thermic curve has been taken up.

The opinion that appendicitis may run its course without fever has been rather opposed by statistical studies; Rotter has reduced the proportion of apyretic cases to 11 per 1000, while Rostovtzev put the figure at 9.5 per 1000.

These percentages must be reduced still further when one considers that the primary fever of appendicitis may escape the notice of the hospital physician, for it may last but one or two days. In all these cases it was of short duration and of moderate intensity ($39-39.5^{\circ}$).

Though the simple determination of fever or no fever in a patient with appendicitis is insufficient or even misleading, valuable data may be gathered from studying the intensity, duration, and especially the course of the temperature.

In a circumscribed appendicitis any elevation of temperature beyond the fifth day must be considered an unfavorable sign, denoting the formation of an abscess. The duration of the fever is of less importance prognostically. Herzog in thirty fatal cases noted that they died within the first three days. The intensity of the fever is a very significant feature, for it may be said that the gloominess of the prognosis runs parallel with the intensity of the fever. In cases under medical treatment where the temperature remained below 39° the mortality was 11.5 per centum; when the temperature was above 40° the deaths were 36.3% per hundred. In surgical cases the mortality varies according to the height of the fever from thirty-five to seventy-five in a hundred.

In appendicitis the temperature should be taken in the rectum, for experience has shown that the difference between the axillary and the rectal temperatures may be even a degree and a half.—*La Nuova Rivista Clinico-Terapeutica*, No. 7, Anno VII.

FRANK H. PRITCHARD, M. D.

CAMPBOR IN EXCESSIVE DOSES IN GRAVE FORMS OF PNEUMONIA.—Dr. Schultz, of Bonn, Germany, recommends large doses of camphor in serious cases of pneumonia in order to overcome the paralysis of the vaso-motors, which as is known give rise to the alarming symptoms of this disease. Whenever the arterial pressure remains low he does not hesitate to employ from nine to twelve gms. of the drug per diem. For example, in the case of a man forty-three years he received twenty-three gms. of the camphor in four days and in a child of four years with pneumonia, associated with measles, he administered twelve gms. of the drug in five days.

Amongst seventy-eight pneumonia cases observed in the hospital at Bonn since the month of April, 1901, thirteen affected with grave forms of the disease were treated with camphor in large doses; only two died, one with delirium tremens and the other, an old man with emphysema, from hepatisation of the whole left lung. In none of the cases where this treatment was used were any toxic symptoms observed. Possibly the somnolence of the patients was greater than usual.—*La Semaine Medicale* No. 52, 1904.

FRANK H. PRITCHARD, M. D.

AMYL-NITRITE IN HEMOPTYSIS.—Dr. F. Hare advises amyl-nitrite in hemoptysis, a method of treatment which he has employed in four cases, with success. One case was one of mitral insufficiency, the others of pulmonary tuberculosis. In all three cases inhalation of five drops of the drug was sufficient to cause the hemorrhage to cease immediately. But for sometime there were streaks of blood in the sputa; in one patient there was a recurrence when the drug acted as efficaciously as before. The remedy causes

a dilation of the peripheral blood-vessels, reduces the blood-pressure in the left side of the heart and decreases arterial tension; it has hardly any influence on the pulmonary vessels.—*Hospitals Tidende* No. 48, 1904.

FRANK H. PRITCHARD, M. D.

DISTURBANCES OF VISION AFTER THE USE OF A HAIR-DYE CONTAINING ANILINE.—Prof. Berger, of Paris, reports the case of a patient who had been in the best of health, with no general nor menstrual disturbance preceding the visual affection. The left eye presented a central positive scotoma and ophthalmoscopic examination revealed hyperemia of the disc. Chemical examination of the hair-dye showed it to contain aniline. The visual activity had sunk to one-fifth of the normal. By confining the patient in a dark room and administering the iodide of potash, in three weeks the scotoma had disappeared and the sight became normal. The eye-changes were apparently due to a neuritis toxica.—*Archiv Fuer Augenheilkunde*, Bd. 50.

FRANK H. PRITCHARD, M. D.

EARLY OPERATION IN TRAUMATIC SYNOVITIS.—Balloch, in a paper read before the Southern Surgical and Gynecological Association, made a plea for earlier operative intervention in cases of traumatic synovitis.

After showing cases illustrating the advantages of early operation, the following conclusions were reached:

(1) In most, if not all, cases of traumatic arthritis there is an injury to some structures of the joint.

(2) Conservative measures should not be persisted in too long. If no improvement is manifested at the end of three weeks, the propriety of operation should be considered.

(3) Arthrotomy, properly performed, was not an essentially dangerous procedure and might do great good.

(4) Early operation will give a greater proportion of useful joints in a shorter space of time than any other method of treatment.—*Medical News*, Jan. 7th, 1905.

J. D. ELLIOTT, M. D.

DIAGNOSIS OF ULCER OF THE STOMACH.—Ackermann states, that in Cohenheim's clinic, a diagnosis of gastric ulcer is made principally upon paroxysms of localized pain which appear from one-half to three hours after meals, and whose intensity depends entirely upon the kind of food ingested, liquids causing little or no distress, while solid foods bring on most excruciating pains. These pains invariably begin in the epigastrium, are of a crampy, burning or lancinating character and have a tendency to radiate toward one or both sides, into the back or upward toward the sternum.

Tenderness of an epigastric or a dorsal pressure point is also important. The epigastric pressure point is usually situated in the median line, or a little to the left of it, immediately below the ensiform process, while the dorsal point, as a rule, can be found to the left of the vertebral column between the tenth and twelfth dorsal vertebrae. A diagnosis can often be

made upon these symptoms, especially the paroxysmal pains, long before haematemesis or melaena appear.

When present with the other symptoms haematemesis is of particular value, but according to Hemmeter, occurring in only about one-half the cases, its absence is of no significance.

Ehrlich lays special stress upon the so-called "painful emptiness" of the stomach which usually disappears after ingestion of foods, especially liquids.—*Medical News*, Jan. 14th, 1905. J. D. ELLIOTT, M. D.

PROSTATECTOMY.—In cases coming under the head of emergency drainage of the bladder, Erdmann advises doing a prostatectomy in every instance possible, when the prostate is in part the cause of obstruction. He states the indications as follows:

1. Impassable urethra due to stricture with rupture and gangrene of the entire scrotum and perineum.
2. Retrograde haemorrhage, bladder being full of clots and bloody urine, with malignancy of the prostate (unless malignancy is too extensive).
3. False passage; retrograde hemorrhage; suprapubic aspiration with infiltration of the abdominal wall extending to the thorax and to the gluteal regions.
4. Acute obstruction due to exposure to cold and wet, inability to catheterize; trauma of the urethra.
5. Trauma of the urethra, catheterization for several days, retrograde haemorrhage, etc.
6. Deep stricture of the urethra; obstruction; catheterization cystitis with absorption.

This emergency operative procedure is recommended because: (a) Only a few minutes more are required to remove the gland, the haemorrhage, as a rule, is not excessive, and the operative procedure itself does not increase the shock to any degree. (b) the removal of the prostate gives proper exit to the urinary outflow and admits of easy drainage. (c) Washing the bladder is much facilitated. The perineal route is chosen in emergency operations because: (a) The opening is practically at the lowest point of the bladder and complicated devices for drainage such as are necessary in supra-pubic sections are not required. (b) The old, being irritable and feeble and requiring to be moved frequently, the drainage is constantly being interfered with, while in the perineal method it is readily controlled. (c) The after soiling, when the tube is removed, is slight and easily controlled in the perineal method as compared with the supra-pubic. (d) Bladder irrigations are more readily done with less soiling to the bed, etc., by this method.

Erdmann does an external urethrotomy, and through this opening grasps the prostate and enucleates it with his fingers.—*Medical News*, Jan. 14, 1905.

J. D. ELLIOTT, M. D.

PRESERVATION OF THE SEXUAL POWERS AFTER PROSTATECTOMY.—Young, in a paper read before the Southern Surgical and Gynecological Association upon prostatectomy, calls attention to the advisability of preserving the floor of the urethra, the vesu montanum, and the ejaculatory ducts in men whose sexual powers are well preserved (and these represented

over 50 per cent. of his cases), as impotence nearly always follows operation in which the floor of the urethra and duct are destroyed. In a large proportion of his seventy-five cases the sexual power and ejaculation were preserved, and even spermatazoa present in the semen afterward. The preservation of the prostatic urethra does away with the necessity of post-operative sounding and greatly hastens the closure of the perineourinary fistula.—*Medical News*, Jan. 14, 1905. J. D. ELLIOTT, M. D.

THE LIMITATIONS OF OPERATIVE INTERVENTION IN CANCER OF THE CERVIX UTERI.—Under this title *Balloch* (Washington) has discussed some of the salient points involved. He points out that in spite of much research we are still in the dark concerning the etiology of cancer, and hence are not in a position to successfully cope with the disease. Since then there is no aid in sight from the pathologic side, there only remains for us to try to better our results from a clinical standpoint. From his animated discussion he draws the following conclusions:

1. The present status of operative intervention in cancer of the cervix uteri is that operation is practically useless in cases as they usually come under the notice of the surgeon.

2. In the operable cases the only procedure offering any reasonable prospect of a permanent cure is the so-called "radical operation" by the abdominal route.

3. Vaginal hysterectomy is useless as a radical operation, but has a place as a palliative measure.

4. The upper part of the vagina is deserving of more attention from the standpoint of recurrence, than it has heretofore received.

5. The most promising outlook for these cases lies in early diagnosis, combined with thorough and complete operative measures.

6. The starvation of the disease by cutting off its blood supply is a palliative measure worthy of trial and a valuable addition to our operative technique.—*Amer. Jr. Obs.* Vol. 50, 737.

THEODORE J. GRAMM, M. D.

CONSERVATION OF THE NATURAL RESISTANCE OF PATIENTS IN SURGICAL WORK.—*Morris* (New York) has written a pointed article, which deserves attention, in view of the tendency to multiple operations. He says Lawson Tait was the first great exponent of the principle of conserving the natural resistance of the patient. The reasons given for his remarkable statistics were various, and not all were complimentary, because many of us could not understand, judging from our own experience, how he could have so small a mortality rate. Tait operated very quickly. He did no more than was necessary in a given operation. He avoided handling viscera unnecessarily. He avoided disturbing the patient's mind with details about what he was to do, and carried in his presence an air of optimism. Morris mentions some of the common ways of lessening the natural resistance of the patient, and foremost among them he mentions prolonged administration of anæsthetics. All of us have seen patients carried to the danger line with ether and with chloroform. On the other hand, we have watched with satisfaction the work of men who are expert in administering an anæsthetic. Prolonged operating is another factor in taking away the

patient's cell self-control. Quick work, not at the expense of incomplete work, conserves the natural resistance of the patient. Almost any patient is in good condition after fifteen minutes of operating, no matter what we are doing. Almost any patient, too, is depressed by an hour of operating, no matter what we are doing. The use of gauze packing in abdominal work is another way of lessening natural resistance. The employment of gauze packing was the natural outcome of the teaching on the subject of drainage a few years ago. We were trying to drain away all septic fluids and culture media, and got to the point where the matter was overdone. Washing and wiping the peritoneal cavity also lessens natural resistance. In some cases it certainly produces shock, and by so much lessens the ability of the patient to manufacture leukocytes. If we wash and wipe the peritoneal cavity and put in extensive drainage apparatus, we cannot by any means remove all of the septic matter. The patient can do it, but we cannot. Leave him as nearly uninjured as possible, and it is astonishing to observe what he will do with his toxins.—*Amer. Jr. Obs.* Vol. 50, 774.

THEODORE J. GRAMM, M. D.

CAESARIAN SECTION FOR PLACENTA PRAEVIA—AN IMPROPER PROCEDURE.—*Holmes* (Chicago) says in spite of the testimony of those who claim Caesarian section is a harmless operation, the mortality of the operation is still high, which refutes the statement of those who really are not in a position to speak with full authority. He gives some statistics. The mortality of placenta praevia is dependent upon the procrastination of the attendants, disregarding the significance of the hemorrhage, the half-hearted way of treating the cases, and the attempts to carry the woman through the remainder of the pregnancy. Further, the direct cause of the high mortality in general practice is due to inadequate assistants, insufficient armamentarium, and absence of conscientious asepsis.

As the placenta in these cases is situated in the lower uterine segment which has the minimum amount of retractility and contractility, there is the same danger of an abnormal third stage in Caesarian cases as when the case is treated obstetrically, therefore there is great liability of post partum hemorrhage. A particular danger of the placenta praevia cases is of infection, for the placental site is so close to the lochia which is purulent that the germs may easily find their way up into the most dangerous field of an infection.

Caesarian section for placenta praevia has not received the approval of one obstetrician whose experience warrants an authoritative statement. Every obstetrician who has been driven to perform the operation in the presence of praevial hemorrhage has had the policy dictated by grave complications like pelvic contractions. On the other hand, every surgeon and general practitioner who reported an operation has been led to do the work because it was a placenta praevia and nothing else. The men who have recommended the Caesarian section for praevia are men who admit they know little or nothing about obstetrics.—*Amer. Jr. Obs.* Vol. 50, 841.

THEODORE J. GRAMM, M. D.

ARTIFICIAL ABORTION FOR A SERIOUS AFFECTION OF THE EYE DURING PREGNANCY.—Numerous observations have proved beyond any doubt that there

is a certain relation between the eyes and the female genital organs, the alteration of these many a time being responsible for the appearance of ocular diseases. Disturbances of the menstruation have produced diminution of the visual field, choroiditis, keratitis, hemorrhage in the vitreous, and periodical detachment of the retina: pregnancy amblyopia, optic neuritis and glaucoma, while a pathological puerperal state has been the cause of metastatic inflammation and suppuration of the eye ball. The authors report a case of ocular affection during pregnancy which was becoming worse every day, and was greatly improved with the interruption of pregnancy. The patient, 38 years of age, had had four previous pregnancies. Toward the third month of the fourth one she noticed all at once a deficiency in the upper part of the visual field of O. D., and two days afterward became totally blind in it. Diagnosis of extensive detachment of the retina was made. Soon after the patient had become pregnant for the fifth time she began to notice with terror a diminution of the sight in the left eye. The diagnosis revealed a progressive atrophic choroiditis and after having exhausted all the ordinary means of treatment, the retina becoming somewhat opaque and fearing the same results as in the other eye, the patient was referred to the Maternity Hospital. Here artificial abortion was performed, after which the eye conditions steadily improved, the retina became entirely transparent, the choroiditis was arrested, some of the recent exudate disappeared and vision from 20-200 finally got to be 20-70 with the correction of ten D. of myopia.

The authors attribute the eye affection in the present case to the enlarged general circulation in pregnancy from the placenta, to the increased tension of the blood and the hydremia, for which transudation through the blood-vessels is rendered easy, and finally to alterations already existing in the choroidal vessels and eye membranes due to the high degree of myopia.—Delzoppo and Soll. *Annals of Ophthalm.*

WILLIAM SPENCER, M. D.

CAUSES OF MYOPIA. THE CURE OF CASES OF PROGRESSIVE MYOPIA.—Based on the supposition that the elastic fibres of the sclera influence its elasticity co-efficients in an equal measure, and therefore must play a considerable role in the development of progressive myopia, Laudoet examined four myopic eyes (two of 10.D, one of 7.D, and one of unknown degree, but without doubt myopic) with regard to the presence of their elastic fibres and compared these with five emmetropic eyes whose sclera were tested in exactly the same manner as to their elastic fibres after the method of Weigert and Unna. It was thus ascertained that the sclera of the four myopic eyes contained practically no elastic fibre, while the sclera of the five emmetropic eyes contained a great number of them. This difference in the amount of elastic fibres contained in the myopic and emmetropic sclera has in all cases been so pronounced, that Lange contends, since fetal eyes of the 5th, 6th, and 7th month, which were examined by him, contained no fibres, and since numerous eyes of the newly born showed only traces of elastic fibres, that progressive myopia depends upon a congenital origin, a congenital deficient development of the elastic fibres, and that this represents the anatomical, hereditary basis of myopia.—E. Emmert. *Annals of Ophthalm.*

WILLIAM SPENCER, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.,

with the collaboration in Foreign literature of P. W. Shedd, M. D.

NEPHRITIS ACUTA: CANTHARIS.—Patient aet. 60, corpulent, plethoric; sick for six days from cold after sweating. Chills followed by heat and violent headache. In the left renal region cutting pains following the ureter to bladder, with almost ineffectual desire to micturate and infrequent voiding of a few drops of highly colored urine. On the third day the right kidney was affected, but in less degree, abdomen swollen, painful. Heat with great thirst; anorexia, sleeplessness. The renal pains grew almost unbearable. Pulse rapid, hard, frequent. Two years before he had had a similar attack which lasted for three months under allopathic care.

R. Aconite 30, without result. After eight hours, Cantharis 30. After midnight a discharge of urine looking as if loaded with a brownish pus.

Within three days the attack was over save for an occasional cutting pain in the left kidney, for which two doses of Cantharis were given. After eight days slight pressure in the left renal region removed by Nux Vomica. —Dr. Mossa. *Allgemeine Hom. Zeitung*.

HYSTERIA: PHOSPHORIC ACID.—According to Dr. Van den Neucker, the best remedies in hysteria are Ignatia and, particularly, Phosphoric acid. He mentions the case of a country woman, healthy save for her hysteria. When this appears she takes to her bed, apparently paralyzed, indisposed to any activity. This state of physical and moral powerlessness, obstinacy and ill-will was removed in four days by Phosphoric acid, the remedy being continued for several weeks. A relapse a year later was not influenced by Ignatia but again cured by Phosphoric acid. She formerly had attacks lasting for five or six months, but for the last six years has been relieved in a few days by Phosphoric acid.

In another case, girl, aet. 20, attacked with abdominal pains, Chamomilla followed by Arsenic was unavailing. He suspected hysteria, and Phosphoric acid immediately cured. Two or three relapses were disposed of by the same agent. Marital troubles are frequently etiologic in hysteria, and here Asafetida merits consideration.

Dr. Van de Neucker cites a case of violent headache in a woman, aet. 20, which resisted all medication, Belladonna, Aconitum, Bryonia, Ignatia in succession. Phosphoric acid given persistently for several weeks effected a radical cure. The keynote symptom was the nervous, hysteric prostration.—*Journal Belge d'Homœopathie*.

ANTIMONIUM TARTARICUM.—The pathogenic picture of this remedy is dominated by its specific relation to the circulation, especially of the venous system. Everywhere are seen signs of venous stasis, primarily lungs, brain, skin, stomach; secondarily in the liver and kidneys. It is furthermore a pronounced cardiac poison (whence possibly, in part, its venous action). The pathogenesis shows that its paralyzant effect upon veins and heart is a secondary action, preceded by a short primary stage of excitation. Hence, homœopathically, Antimonium Tartaricum is used to stimulate the circulation, remove venous stasis, bring the vascular system into equilibrium. It is our best remedy in lung inflammation. The stasis in the pulmonary vessels is quickly removed, the dermal circulation hastened, the heart relieved and strengthened. In asthmatic bronchial catarrhs, in pulmonary edema, in pertussis and croup, especially where cardiac paralysis threatens, it acts well, because of its specific relation to the blood-vessels of these tissues.

As a skin remedy it hinders too inflammatory a development of the pox; is a specific in variola. In postular eruptions, acne, furuncle, it is indicated, and a deep and rapid destruction of tissues is characteristic. Because of its acceleration of dermal circulation it is very useful in scarlatina, measles, etc., bringing the eruption quickly and surely to the surface, and hindering unpleasant complications.

In muscular rheumatism due to a local blood-stasis, in lumbago, in many sciaticas it is serviceable. It is to be considered in cerebral venous hyperemia, in soporific and apoplectic states; further, in hepatic and renal congestion.

It is suited to patients with inherited or acquired weakness of the venous system; circulatory weak; so-called venous constitutions with phlegmatic temperament (carbonitrogenoid); torpid individuals require it, while the florid, arterial (oxygenoid) types do not come within its sphere of action. Like all venous remedies (Cf. Pulsatilla) it is by motion, by cold; warmth and rest aggravate all symptoms. Finally, in low potency it is anthelmintic. The best potencies are the 2x–6x triturations.—Dr. Grubel. *Hom. Monatsblätter*.

SUPRARENAL EXTRACT IN THE TREATMENT OF ADDISON'S DISEASE.—Dr. A. W. Calloway, reports in *Clinique*, one case of Addison's Disease in which the administration of suprarenal extract and adrenalin solution was followed by disappearance of pigmentation and much general improvement. He gave, at first, ten drops of adrenalin chloride solution every four hours. Later, five to ten grains of suprarenal extract, in powder, were administered every fourth hour.

HOMOEOPATHIC REMEDIES FOR INFLAMMATION OF THE UTERINE CERVIX.—Dr. Homer I. Ostrom regards the salts of potassium as exquisitely similar to both the pathology and symptomatology of inflammatory lesions of the cervix uteri.

Kali Muriaticum.—This drug exerts a specific action upon the cellular tissue and induces changes in epithelial cells that result in their desquamation from the basement membranes. This salt also causes an increased activity of the gland cells, thus augmenting secretion. The processes of

Kali Mur. are essentially chronic, and in inflammation of the cervix appear as a follicular, glandular hyperplasia. There is a mechanical erosion of the surface with a perfectly bland catarrh. The neoplasm is smooth and shining with a passive degree of hyperaemia. General anaemia is usually marked when this remedy is indicated. The uterus is heavy, and there are present heavy, dull pains in the sacrum.

Kali Phosphoricum.—Through interference with nutrition, and because of changes in the blood corpuscles, this drug induces destruction of the adenomatous growth. The disease may be of the variety requiring amputation of the cervix, but in addition to the hyperplasia, when kali phos. is indicated, there will be molecular necrosis and a muco-purulent catarrh. There will also be characteristic paroxysms of sharp pelvic pain with lameness and general exhaustion. For the neurasthenia that frequently accompanies cervical glandular hyperplasia, kali phosphoricum is well nigh a specific.

Kali Sulphuricum should be thought of for the milder forms of cervical inflammation before the hyperaemia is marked and before the glands have become involved. The action is upon the epithelial cells of the mucosa, which rapidly proliferate and give rise to a profuse yellow leucorrhœa. The surface of the os is soft and pale, and mechanical irritation is more likely to give rise to an increase of the catarrh than to induce bleeding. Because the blood is poorly oxidized, the patient, though chilly, craves the open air with the instinct of forcing oxygen into the blood.

Iodine is one of the most frequently indicated remedies in pronounced varieties of glandular hyperplasia. There is present a well-marked scrofulous diathesis to which the inflammation may be traced. The os is soft, and conveys the impression, to the examining finger, of papillomatous tissue that can be moved on a hard indurated base; a diagnostic sign suggestive of the earlier stages of malignancy. The leucorrhœa of iodine is very excoriating.

Hydrastis Canadensis corresponds to the severer and more advanced forms of cervical hyperplasia in which there is marked molecular necrosis, but the ulceration is superficial when *Hydrastis* is indicated. The catarrh is almost exclusively cervical, rarely vaginal, and is muco-purulent and tenacious. Dull pain in the back is marked, and the digestive organs sympathize with the uterine disorder.

Hydrocotyle Asiatica is indicated in the acute varieties of inflammation of the cervix. The uterus and pelvic cellular tissue are involved in the morbid process, generally secondary to the cervical disease. There is active congestion, the mucous membrane protruding from the cervix in the form of a mushroom. The principal seat of the pathological changes is in the anterior lip of the cervix. In this location the mucous glands are hypertrophied, giving the appearance of granulations. There is entire absence of tissue destruction and the catarrh is perfectly bland. The uterus is heavy and sensitive and there is a dull, persistent pain in the region of the left ovary. The vagina is hot and burning, with insupportable itching, but without local lesions there.

We commend these indications to our readers. The author evidently knows his subject. He adds the following capital advice regarding the use of constitutional remedies following operations: "That an operation has

been successfully performed, is not sufficient reason for the discontinuance of the remedy indicated by the local and general symptoms, that made the said operation necessary." "A certain state of the system existed that favored the local manifestations, and there is no reason to suppose that, with the removal of the local pathology, the deranged system will also be thereby corrected." This is a point sometimes overlooked by our surgeons.

THE TREATMENT OF PINK-EYE.—In this disease, the bacteriologist has taught us a valuable lesson. *Chloride of zinc*, diluted materially, say one part to five hundred parts of water, is fatal to the germ and prevents its further ravages. Locally applied, this drug will relieve the patient more quickly than any internal remedy I have ever used. In catarrhal conjunctivitis, on the other hand, with all the symptoms of pink-eye except the specific bacillus, I infinitely prefer the homœopathic remedy to any local application.—(Royal S. Copeland, M. D., in *N. A. Journal of Homœopathy*.)

TOO MUCH OF A GOOD THING.—There is such an expression as this, and it passes current even in polite society. It is quite possible that some of our editors have never heard of it. For the benefit of those, we would like to say that we have heard it said that some homœopathic monthlies are "very tiresome," because they contain so many articles, in full, that have already been published in one or more magazines. You see, after one has listened to a paper at the Society, has heard it re-read at one or more medical clubs, has read it for himself, in his favorite medical journal, it becomes tiresome to him to see it again and again in other periodicals. No matter how excellent the article, he gets "too much of a good thing" in the course of time. And so, too, when one purchases a new book upon *materia medica* and reads it, he does not care to see whole chapters from that book, published in toto, under catchy titles in the medical journals month after month.

TOXEMIA AND ALBUMINURIA OF PREGNANCY.—In an interesting article upon this topic, *Clinique*, Dr. E. S. Snyder says that he believes all pregnant women are better off without meats of any kind during the pregnant state. He recommends the use of *Arsenite of Copper* and *Apis Mellifica* particularly. This latter remedy should not be overlooked in the treatment of these cases as its pathogenesis presents almost a perfect picture of the affection referred to. The oedema, the waxy, whitish, transparent appearance of the skin, the absence of thirst, scanty urination with highly albuminous urine containing tube casts, makes *Apis* a very suitable remedy for the cure or prevention of the untoward symptoms.

THE IMPROVEMENT OF THE HOMŒOPATHIC COLLEGES.—*Progress*, under the leadership of its indefatigable editor, has been devoting much space in recent issues to the consideration of the important question of The Homœopathic Medical Colleges and the present status of affairs relating to their teachings and management. Many excellent papers have been published, from which we glean that the most glaring fault of our colleges is the failure to teach homœopathic *materia medica* and homœopathic therapeutics as thoroughly and exhaustively as these essential branches should be taught. Dr. Frank Kraft proposes that our colleges *hire* the best homœopathic teach-

ers in the world and so raise the standard of homœopathic teaching. He also thinks that it is a good plan to have, in every homœopathic faculty, at least a few men who are really deeply interested in homœopathy and its future good. These are practical suggestions, but rather difficult to carry out. Why? Oh, we don't know. Try them.

THE TREATMENT OF KERATOSIS AND MYCOSIS TONSILARIS.—The most satisfactory treatment of keratosis is the actual cautery and curettement followed by applications of twenty to forty per cent. chromic acid. Mycosis tonsilaris should yield to *Echinacea*. Give five drops of the tincture, three times daily. When a profuse catarrhal nasal secretion exists, *Lemna minor* 6x. dilution, five drops on retiring, will be found to be an excellent remedy. Dr. Shearer, after an extensive study of mycosis tonsilaris, claimed that no remedy had been found capable of exerting a direct curative influence upon the disease. These suggestions are therefore valuable. *Kali phos.* 6x. trituration has been found to be useful when the disagreeable odor was a prominent feature of the cases.—(George B. Rice, M. D., in *New England Medical Gazette*.)

THE IMPORTANCE OF SUCCUSSION IN THE MAKING OF POTENCIES.—Doctors and pharmacists alike would probably insist, if the matter was gravely put before them, that effectiveness can only be developed in our potencies by powerful succussion. The liberation of the medicinal energy of a drug, is not a matter of pouring that drug into alcohol or water and trusting to a chance diffusion. This is another detail of the preparation of medicaments that is perfect in theory but sadly neglected in practice. We should very much like to have the name and address of a homœopathic pharmacy in which the following slipshod procedure never occurs: You enter the pharmacy and ask for a certain potency of a certain drug. The attendant or clerk opens one or two drawers, closes them again; goes to the shelves, obtains a box of bottles, pours out a small quantity from one bottle into the ounce vial which you desire, fills the same with alcohol from the stock bottle and then can be heard sundry little slaps of bottle against palm of left hand. You wonder what it is that you are getting. Vague feelings fill your mind that you are not getting what you hoped to obtain. Of one thing you may feel certain and that is your potency has not received proper succussion; and moreover, you begin to doubt whether the pharmacist really believes in the absolute necessity of powerful succussion as the means whereby the medicinal energies of crude drugs are liberated. And likewise, when we observe a doctor mixing an indefinite amount of tincture with an indefinite amount of menstruum; and then giving the bottle a few light taps upon his knee or palm, you again wonder whether there is not a tendency to overlook essentials in pharmaceutics. Quite recently, we went to a neighboring city for the purpose of obtaining some medicines in high potency. We had read the printed statement of this pharmacist that reliable potencies could not be prepared in the way that we have above referred to. Alas, his clerk went through the identical procedure of mixing a small quantity of potency with a larger quantity of alcohol and then "spanking" the bottle (not severely) upon its bottom. Perhaps we are entirely mistaken, but the above facts can be substantiated by witnesses.

THE DECADENCE OF LOYAL HOMŒOPATHS.—If you had a son who wished to study medicine, would you send him to an allopathic college to obtain his medical education? Statistics, of limited amount, seem to show us that you would. That is, so many of our friends have done so and are still doing this, that it looks as if our school was going to be betrayed by its own friends. One of our colleagues, a staunch homœopath who has learned how superior the homœopathic method is to any other after an experience of nearly a quarter of a century, explained that he had determined that his son should have the prestige of an old school diploma. By which we suppose he means that his son shall not be debarred from an army nor a navy appointment should he desire to enter such service. It is not at all likely that the son will wish to do this, but the father feels very keenly the humiliation of not being recognized in public service. Thus in ways too numerous to mention is our school losing sight of the important point at issue—the truth and absolute superiority of the method of similia over all systems of drug selection. Striving for everything else, but neglecting homœopathy, homœopathic principles and homœopathic institutions; which latter are the bulwarks standing between us and dissolution and extinction.

THE DANGER FROM THE FREE USE OF THYROID PREPARATIONS.—In a recent meeting of the *Société de Thérapeutique* of Paris, papers were read on this subject.

Dr. Bardet mentioned three cases: A man, sixty years of age, robust and gifted with an extraordinary appetite, suffering from *obesity*, took a course of thyroid treatment, having read in an advertisement as sure cure for reducing fat. He lost considerable flesh, but at the same time cardiac symptoms developed. Troublesome tachycardia manifested itself even two months after the man had ceased taking the anti-fat medicine. He suffered all along; when the doctor was called in and having found the cause, he advised him to discontinue it. Dr. Bardet met two other identical cases.

Dr. Albert Robin also corroborated the statement of his colleague and furthermore he mentioned two deaths. One was an engineer, extremely fat, and in spite of medical advisers he continued to indulge in taking thyroid preparations. He died suddenly from syncope following many attacks of tachycardia. The second was a physician who died under similar circumstances.

Dr. Dignot mentioned two other cases of his own, caused by thyroïdine. One a young woman who not only suffered from cardiac troubles but had a profuse uterine hemorrhage.—*L'Art Medical*, January, 1905. Dr. John Arschagoumi.

NYMPHAEA ORDATA AS A VAGINAL DOUCHE.—Wilson A. Smith, B. S., M. D., in *Century*, says that he has tried many remedies, but never has found one that equalled in efficiency the pond lily root. To one quart of water, he adds one teaspoonful of infusion of pond lily root. This vaginal douche is used every alternate evening. It seems to tone up the parts, relieving vaginal inflammation. Leucorrhœal discharges cease; and the sensations of pressing down, due to relaxation, are soon relieved.

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ASPIRATION PNEUMONIA.

BY CLARENCE BARTLETT, M. D., PHILADELPHIA, PA.

(Read before the Homœopathic Medical Society of the County of New York
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It is an old saying that people do not die of their diseases. Astonishing as this statement may appear when it first strikes upon one's ears, nevertheless, a little thought enforces the truth it enunciates. Its special application relates to terminal infections, which are, with too great frequency, the immediate cause of death in many cases of cardiac and renal disease, arterio-sclerosis, cirrhosis of the liver, cancer, tuberculosis, and numerous other disorders. While the micro-organisms productive of the fatal result are many, I need only mention by way of illustration the pneumococcus and the streptococcus pyogenes.

The present communication proposes to consider one of these incidental modes of death, namely pneumonic infection arising from the introduction of infectious substances into the pulmonary parenchyma. To this condition the terms "aspiration pneumonia" and "deglutition pneumonia" have been variously applied; "deglutition pneumonia" because the majority of cases result from the entrance into the bronchial tubes of particles attempted to be swallowed; and "aspiration pneumonia," because some cases arise from the aspiration of infected mucus, as during ether anaesthesia. As in all cases the infected particles reach the pulmonary alveoli by the act of respiration, the latter term is to be regarded as more compre-

hensive and exact, and, moreover, is well adapted to explain the entire class of cases which we are about to consider.

To those who have seen a number of these cases, the etiological factors are plain. No other explanation than the introduction of infectious material into the pulmonary parenchyma by way of the respiratory tract seems tenable. Ether pneumonia probably represents the simplest of the types of aspiration pneumonia. Some writers have seemed to make it a mystery. The rational explanation of its incidence may be stated as follows: The mouth is the abiding place of a great variety of micro-organisms, pathogenic and non-pathogenic. According to various observers from 15 to 30 per cent. of all presumably healthy individuals harbor the pneumococcus. Etherization is attended by the profuse production of tracheal mucus, which during the expiratory movements is forced upwards into the mouth, to be returned to the trachea and bronchi with the succeeding inspiration. While in the mouth, it becomes infected or mixed with the micro-organisms contained in that cavity. Were it not for certain fortunate conditions, many pneumonias would thus result. It so happens, as has been determined by careful experimental work, that the pneumococci resident in the mouth do not possess a high degree of virulence, and it is more than probable that their host is the subject of decidedly limited susceptibility. The natural immunity of the lungs to bacterial invasion in individuals who are locally and constitutionally in good health is an additional safeguard. The care given the patient during the operation must also operate in his favor. Prolonged and unnecessarily profound anaesthesia we must reasonably believe to be detrimental. The careful swabbing of the mouth with every ejection of mucus lessens the chance of its aspiration. The warm atmosphere of the operating room and the proper draping of the patient eliminate as far as possible the element of cold as an etiological factor.

Here let me say that every case of post-operative pneumonia must not be called an "ether pneumonia." The surgical patient is not immune from the samemishaps as befall the healthy. In some seasons, of which the present is a notable example, the pneumococcus is omnipresent, and opportunities for infection are unlimited. The true ether pneumonia belongs to the catarrhal variety. The possibility of lobar pneumonia resulting from ether anaesthesia is too remote to be worthy of

much consideration. One writer finds that it has occurred but five times in 5,000 anaesthesias, and Van Lennep in nearly eight thousand operations has not seen it once. On the other hand, pneumonic fever may be post-operative and occur independently of operation accidents. During the present winter, I have had the opportunity of treating three such cases, all occurring about the same time, and in patients who occupied beds almost adjoining each other. Numerous cases of lobar pneumonia were in the hospital. All three patients had been in the medical wards. It is more than probable that the only influence of the operation in the etiology of the case was that of increasing the patient's susceptibility to infection.

Clement Lucas tries to explain the incidence of ether pneumonia by the use of infected inhalers,—an explanation that must impress most of us as bordering on the ridiculous.

In pre-anaesthetic days, a post-operative pneumonia was recognized, and mention was made of it in the medical literature of that period. In view of the deficient pathological knowledge of the day, and the limited methods of clinical investigation, it is not wise to draw any conclusions as to the nature and origin of these cases.

To the medical man, the aspiration pneumonia which occurs in the insane, apoplectic, uraemic, epileptic, nephritic, and other classes of patients who, at times have their sensibilities blunted, is of greater importance. Their frequent incidence during the course of nervous diseases, or as an accompaniment of nervous manifestations of serious local or constitutional disease, has led to their acceptance as a mysterious interposition of Providence to end the days of the sufferer from an incurable malady. Current works on Physiology do much to help the acceptance of this view. Thus in the *American System of Physiology*, published in 1900, we read:

"The existence of trophic fibres is generally admitted. After section of one pneumogastric, nutritive changes immediately begin in the lung of the corresponding side, which changes are manifested in the appearance of inflammation in the middle and lower lobes. Section of both nerves is followed by inflammation in the middle and lower lobes of both lungs."

Halliburton (*Handbook of Physiology*, published in 1904), says:

"The animal, however, lives a considerable time; a warm blooded animal usually dies about a week or ten days from

vagus pneumonia, due to the removal of trophic influences from the lungs. Cold blooded animals live longer; they exhibit fatty degeneration of the heart muscles also."

On page 814 of his book, Halliburton, again speaking of the trophic fibres of the pneumogastric nerves, uses language which modifies considerably the impression his reader received from the above quotation.

"If both these nerves are divided, the animal usually dies within a week or a fortnight from a form of pneumonia called vagus pneumonia, in which gangrene of the lungs is a marked characteristic. Here the predisposing cause is the division of the trophic fibres in the pneumogastric nerves; the exciting cause is the entrance of particles of food into the air passages, which, on account of the loss of sensation in the larynx and neighboring parts, are not coughed up."

To the clinician, the existence of a true trophic pneumonia is chimerical. Even though the lungs be in a normal condition, and their innervation perfect, the accidental entrance of particles of food stuff or infected substances must be followed by pneumonia. Vagus pneumonia is therefore probably a myth, for it is really a deglutition pneumonia made possible by disturbance of the sensory function of the larynx.

In all clinical states characterized by impairment of the general sensibility or of laryngeal sensitiveness, foreign particles may readily enter the larynx without exciting the reflex cough necessary for their expulsion. Thus they are retained, and permitted to enter the air tubes, infecting them, producing inflammation, gangrene and death. The same thing may happen in ulcerative conditions or inflammatory infiltration about the larynx, when mechanical causes may lead to the entrance of food into the larynx.

Good examples of the aspiration pneumonia attendant upon impaired general sensibility are often found in cases of apoplexy and succeeding convulsive diseases. In the apoplectic cases, it is the usual experience to have the patient present the ordinary phenomena of cerebral hæmorrhage with stupor for a few days. Then the temperature rises, and respiration is quickened. If at this time the chest is examined, percussion dulness, râles, and tubular breathing will be discovered over one or both bases posteriorly. Too often we are inclined to regard the condition as one of hypostatic pneumonia. So far as this patient is concerned, the diagnosis matters not, for the

damage has been done. The danger of aspiration pneumonia should be guarded against from the beginning, for prevention is the only remedy. After two or three days of additional illness, the patient dies; not of his cerebral lesion, but of aspiration pneumonia.

During the past winter, there was admitted to the Hahne-mann Hospital, a man aged 40 years. His life had been one of dissipation. When admitted he was in convulsions, which continued for several hours. His urine contained albumin, was of low specific gravity, and hyaline and granular casts were numerous. The diagnosis of chronic interstitial nephritis and uræmic convulsions—so-called—was made. A few days after his return to consciousness, he developed a cough with râles at the right base. Soon percussion dulness and tubular breathing appeared. Râles became coarser. The expectoration at first muco-purulent, became purulent, then grayish, bloody and highly foetid. Microscopic examination showed the presence of pneumococci, streptococci and elastic fibres. He exhibited the typical septic temperature curve. Later, there was clearly defined amphoric breathing below the angle of the right scapula. The left lung was normal. The propriety of an operation was suggested to the patient. We did not insist upon it, because it was not unlikely that the coincident nephritis made recovery from the operation problematical, and moreover, even though he recovered, it was more than likely that he would shortly succumb to the renal affection. After an illness of eight weeks he died. The autopsy showed far advanced interstitial nephritis and a gangrenous cavity in the right lung at the point specified. It could have been readily attacked by operation, had such been advisable. This case carries with it a special lesson not germane to this paper. Opposite to this patient was a case of cirrhosis of the liver, who was removed to the surgical ward for epiploexy. Two days after leaving the medical ward, and the day succeeding operation he developed facial erysipelas and the next day again, croupous pneumonia, and the following day he died. The source of infection was not at this time suspected. The patient in the bed adjoining the patient with pulmonary gangrene was suffering from mitral disease with ruptured compensation, interstitial nephritis, and anasarca. After two weeks residence in the hospital, he also had facial erysipelas and died.

Nearby, was a colored man brought in with typhoid fever,—the symptoms of this case indicated a probably fatal issue from the first,—and he developed facial erysipelas twenty-four hours before death. The isolation and death of the case of pulmonary gangrene put a stop to the spread of erysipelas, and so I now assumed that he was the cause of this epidemic. His repeated coughing had been spraying the atmosphere with a vapor rich in streptococci, and those who were in condition for infection succumbed. I report this experience at this time, that it may be a warning to other hospital physicians. I am not aware that the danger of pulmonary gangrene to those in close communication with the sick has been sufficiently appreciated.

Returning to my subject: the loss of general sensibility necessary to the accidental introduction of food particles into the respiratory tract, does not seem to be great. Last June I was consulted by a man aged 56 years, who had persistent headaches, recurrent convulsions, and a syphilitic history. The diagnosis made was syphilitic brain disease, and treatment was instituted accordingly. The great improvement which followed during the next eight weeks was very satisfactory. During the middle of August, however, he suffered a relapse. On my return in September, he had right hemiplegia and aphasia. He was not confined to his bed. He apparently recognized persons who entered the room, and took only an automatic interest in his meals. His nurse,—who by the way was glaringly incompetent, but *cheap*,—frequently found particles of food in his mouth some time after eating, and was warned of the danger. Toward the latter part of September, all medical treatment being unavailing, an exploratory trephining was proposed and accepted. After removal to the hospital, a piece of chewed meat was found in his mouth where it evidently had been several hours. That night the temperature rose to 102 degrees. The following day I was out of town in attendance upon the State Society meeting at Easton, and the patient was seen by Dr. G. Harlan Wells. The signs of pneumonia at the right base developed, and in forty-eight hours the patient died.

Feeding by the nasal or œsophageal tube has been recommended as a means for preventing such lamentable accidents. That the former at least is not infallible, is shown by the following case: A young woman of 22 years, was taken with acute mania. She was placed under the care of a well-known

and capable neurologist. After several days of persistent refusal of food, feeding by the nasal tube was ordered. Unfortunately, the catheter used by the nurses entered the larynx, and milk escaped into the respiratory tract. When I succeeded to the case there was a bilateral pneumonia, and within twenty-four hours, highly offensive expectoration containing elastic fibres. She died four days later. Three hours before death, she regained her normal mental condition, took food with avidity, and expressed the greatest anxiety for recovery.

This case suggests the wisdom of using the large œsophageal tube with mouth gag whenever possible, as diminishing the danger of accidental invasion of the larynx.

Certain operations notably those attendant by sepsis of the mouth seem to be especially prolific of aspiration pneumonia. This list includes cases of malignant disease of the tongue with ulceration, the discharges infecting the respiratory tract. Indeed, it is not necessary by any means, that surgical intervention take place for the occurrence of this accident, for a large proportion of the cases of this die with pneumonia as a complication. On October 4th, I had the opportunity of examining a patient who had undergone an amputation of the tongue for epithelioma. He was in the Hahnemann Hospital as a private patient for three weeks during August. Shortly after leaving the hospital, he began with a slight cough without any other impairment of his health. The cough was loose. The expectoration was described by him as of "phlegm;" sometimes white and frothy, and sometimes offensive. The epithelioma had existed several years prior to the operation. There were enlarged lymphatics on both sides of the neck in front of the sterno-mastoid muscles. Anteriorly, the chest gave no evidence of disease by either inspection, percussion or auscultation. Posteriorly on the left side at about the level of the seventh rib, and one inch from the spinous processes, there was a patch of harsh breathing and breathing of somewhat cavernous character. Percussion did not give satisfactory results. Over this place there was well-defined transmission of the whispered voice. Laterally, at the level of the ninth and tenth ribs, small moist râles were audible. What the ultimate result of this case was I cannot say.

Cases of throat operation in which the discharges consist solely of fresh blood, do not seem to entail any special danger as to the incidence of pneumonia. Dr. H. S. Weaver tells me

that he cannot recall a single case of operation of this class thus resulting. In one instance, in which he operated for intranasal hypertrophies, the patient developed the following day, the characteristic symptoms of a croupous pneumonia, which I treated, and which notwithstanding the alcoholic habits of the patient reached its crisis on the fifth day. Were aspirated blood of itself a sufficient cause for pulmonary inflammation, we would have aspiration pneumonia of frequent occurrence in cases of pulmonary hæmorrhage.

The occurrence of pneumonia in the course of diphtheria is, as a rule, to be explained on the supposition that portions of the membrane are drawn into the respiratory tract and produce secondary infection. The ultimate pathological results of the accident are rarely determined because of the early deaths of such patients.

The supervention of aspiration pneumonia in the course of chronic pulmonary infections is an interesting problem. So far as literature and clinical experience are concerned, it is of rare occurrence. Yet we may harbor this belief because of infrequent and incomplete examinations. Auffrecht affirms that local affections of the bronchi complicated by ulceration, carcinoma of the air passages, carcinoma of the œsophagus ulcerating into the air passages are capable of producing the disease we are studying this evening.

The frequency of secondary infections in the course of pulmonary tuberculosis as the result of the aspiration of discharges may well be a debatable point. Judging from personal experience as well as that of my colleagues, it must be a rare accident. The pneumonias complicating tuberculosis are only exceptionally of the lower lobes and bilateral, as they would be were they of the aspiration type. Baumler is a firm believer in the occurrence of an acute inhalation or aspiration pneumonia in the course of phthisis. Auffrecht suggests that it is possible "that in patients in whom either in one or in both apices old cavities surrounded by calculous tissue were found, purulent or hæmorrhagic contents of these cavities may have been aspirated. The direct occasions of carrying the inflammatory cause which may exist, in addition to the bacillus tuberculosis, are hæmorrhages from tuberculous sections and the aspiration into the finest bronchial twigs of blood containing the morbid matter." Personally, I hold to the belief that accidents of this kind are rare; while *a priori* reasoning would lead

us to believe that they should be common. Their rarity may be explained by reason of the non-susceptibility of healthy pulmonary tissue to infections and to the possible establishment of an immunity from infection by a disease already existing.

Aspiration pneumonia is only of occasional occurrence in new-born infants; and yet the aspiration of the maternal discharges must be of common occurrence. Silbermann's investigations seem to prove that the majority of cases occur in infants born of septic mothers. Musser, however, reports one case in which the mother was healthy, but the labor was delayed, and required instruments for its completion.

The generally accepted view as to the pathological changes in aspiration pneumonia assign it to the catarrhal or lobular type. Auffrecht alone dissents from this view, because the lesion is primarily of the alveoli and the interalveolar structures, while in catarrhal pneumonia, the pathological changes start in the smaller tubes. A discussion of this point matters little practically, for ultimately, the changes in either case are alveolar. With purely pneumococcic infections it is difficult to see how the changes can differ from those observed in other pneumonias. In cases which do not recover promptly, and tend toward an unfavorable issue, necrotic areas, or even extensive abscess or gangrene supervene.

Coming now to the symptomatology and diagnosis of aspiration pneumonia. Experience shows that there are but few rational symptoms upon which we can rely for a diagnosis. Dependence must be placed upon the physical examination of the patient. In a certain proportion of the cases, we do have the ordinary phenomena of catarrhal pneumonia, including fever, rapid respiration, and cough with expectoration. These at once direct attention to the chest as the *causa mali*. More frequently, increase of temperature with or without rapid respiration may be the sole symptom, and even this may be complacently accepted as due to sepsis if the case is a post-operative one, or as an aggravation of the primary disorder or a visitation of Providence, in medical ones. It is usually stated that the lesions are bilateral, and are accompanied by a general bronchitis. This has not been my experience. Latency, of course, seems to be the rule; using the term latency here to indicate unobtrusiveness of symptoms. Last spring, a mining engineer, aged 32 years, came under my care because of morphia addiction mainly, and severe neuralgic pains involving one

leg below the knee. Gangrene involving the toes and originating in frost bite brought him to the Hahnemann Hospital as a patient of Dr. W. B. Van Lennep. Symptoms of septic infection were at that time well-defined. Free incisions were made into the foot. After the line of demarcation was established, the toes were amputated, but the neuralgic pains still appeared to continue. The neurotic conduct of the patient led us to believe that after all the craving for morphia was an important cause of the patient's suffering. The surgical lesions doing well, an effort was made to break up the habit, the patient taking four grains daily prior to coming under our care. After a week, we succeeded in bringing the amount down to two grains daily. Any further decrease brought on delirium. It was then that I adopted the bromide cure. Large doses of bromide of strontium—half ounce daily—were given for two days. At once the further use of morphia was not required; but the patient went into a semi-stuporous condition from which he did not recover for ten days. Shortly after this, he developed cough attacks, which recurred but once daily, and were always attended by the expectoration of about half an ounce of sanguinolent sputum. This was examined by Dr. P. S. Hall, who reported that it was rich in pneumococci, and contained no tubercle bacilli or elastic fibres. Well defined dulness was obtainable over the base of the right lung posteriorly. No breathing sounds of any kind were detectable. After a further illness of eight weeks, the cough ceased, and the patient was sent home to all external appearances entirely well. The percussion dulness still remained, and did not clear up until summer was well advanced.

The occurrence of a well-defined chill as ushering in the disease, is rare. Lucas speaks of it as common. So also is the blood stained expectoration. I would insist that we can rely upon the physical signs and them only for our diagnosis.

The prognosis of aspiration pneumonia is more favorable than other varieties of the catarrhal type. Pneumococcic infections usually pursue the same course as that observed in ordinary catarrhal pneumonias. According to the character of the infecting organism, other cases eventuate in abscess, with or without general infection or gangrene. Cases which do not make prompt recoveries, usually follow a fulminating course, or end fatally by abscess or gangrene after a tedious illness.

The important treatment of aspiration pneumonia is the pre-

ventive. The danger of ether pneumonia, small as it is, can be still further reduced by the shortening of the term of anæsthesia to a minimum period. It is well-known that the production of tracheal mucus is the greater in prolonged operations. The quality of the ether used does not seem to have any relationship to the complication excepting as it the more irritating to the respiratory tract. There is certainly no reason for abandoning ether for chloroform as advocated by certain German authorities.

In England, post-operative pneumonias seem to be comparatively common. That they cannot be dependent upon the anæsthetic per se is probable, for English surgeons pay attention to technical details in the use of anæsthetics. Their operating rooms are, however, cool, and the additional cause of pneumonia,—exposure of the patient, is introduced.

Chapman, of St. Louis, advocates the routine disinfection of the mouth and oropharynx by peroxide of hydrogen. This is a rational procedure, involves very little extra trouble, and may be made a routine measure. The contamination of tracheal mucus by the contents of the mouth is by no means a product of the imagination. This was proved by the experiments of Lindermann, who put carmine powder into the mouth of a rabbit, and anaesthetized it for one hour with ether. The animal died with intense râles during the etherization. At the autopsy, carmine powder was found both in the lumen of the trachea and the larger bronchi.

The matter of post-operative pneumonia must be further investigated by careful and systematic physical examinations, before operations. There can be no doubt that occasionally a patient, the victim of some surgical lesion, is at the same time a sufferer from latent pneumonia.

Convulsive and paralytic patients require elaborate and frequent toilet of the mouth. Nurse must pay attention to details in nourishing these cases. Feeding completed, the mouth must at once be washed. This rule should apply even to cases in which the diet consists solely of liquids.

Hypostatic congestion of the lungs favors infection. Hence in all diseases in which this condition is liable to occur, the patient's decubitus should be changed from time to time.

The purely pneumococcic cases are best treated by our ordinary pneumonic remedies, notably ferrum phos. When the fever is high and the pulse rapid from the beginning the best results

are to be obtained from *veratrum viride*. Even the more unfavorable cases are best treated on general principles. Antiseptic inhalations, and drugs having a specific relation to the infectious process, are useless. When the physical signs indicate that the lesion is limited, the case is otherwise hopeless, and the patient has no complicating organic disease, surgical intervention is a wise procedure.

THE PRESENT STATUS OF THE URIC ACID QUESTION.

BY F. MORTIMER LAWRENCE, A. M., M. D., PHILADELPHIA.

A REMARKABLE example of continued popular belief in a long-exploded theory is afforded by the tenacity with which many cling to Haig's conception of the uric acid diathesis. Even among physicians, whose access to the literature of the subject should have shown them long ago that Haig's methods of investigation were unreliable, his results uncorroborated, and his logic and his conclusions absolutely childish, a belief in uric acid as the cause of all the diseases the flesh is heir to seems still to prevail to some extent. I presume that all of us are mentally lazy. We were told years ago that uric acid accumulated in the blood and caused disease, that uric acid in the urine meant an excess in the body, and that the appearance of "brick dust" in the urine always called for a strictly vegetarian diet and above all things avoidance of the red meats. With this belief firmly rooted in our minds, it seems that all the sledgehammer blows of science cannot drive it out. Uric acid has succeeded "biliousness," "torpid liver," and "malaria," as a diagnostic stop-gap, and so popular is it with the laity that he would be a brave physician who would take their latest and most popular toy away from them, and besides, how it would grieve the manufacturers of lithia tablets and kindred delusions!

And then, Haig's theory is so plausible—too plausible. His idea, you will recall, is that uric acid is deposited in the tissues of the body when the solvent power of the blood is reduced, and taken up in the circulation again when the solvent power of the blood is increased. The only thing worse than the first, the deposit of uric acid in the tissues, is the second, its

solution in the blood. Its deposit in the tissues leads to local inflammations, such as catarrh, pneumonia, uterine fibroids, cirrhosis of the liver, abscess of the liver, and appendicitis; but, far worse, when it circulates in the blood it forms a colloid substance and the heart struggles in vain to push this slimy material through the capillaries. Alas, it is ineffectual, the capillaries are blocked, the various organs cannot possibly be nourished, and so the patient falls victim to headache, insanity, epilepsy, paralysis, diabetes, nephritis, aneurism, leukemia, boils, exophthalmic goitre, and piles.

This is not burlesque, not even exaggeration. These are only a few of the diseases ascribed to uric acid in Haig's own book.

It is a beautiful conception. Even a child could understand it, and it seems to me that only a child could possibly believe it. It reminds me of the story of the would-be naturalist who described a lobster as "a red-fish that walks backward." A critic, commenting on the accuracy of this definition, took but three exceptions; that a lobster isn't red, isn't a fish, and doesn't walk backwards. So it is with this uric acid hypothesis. Let me point out a few of its fallacies, as summarized by Billings.

1. Uric acid is not toxic.
2. It is not a causative factor of any disease except possibly gout.
3. "Uricacidemia," i. e., acid blood, does not exist.
4. The chemical reaction of the blood cannot be altered by medicinal quantities of the alkalies or by diet.
5. Uratic deposits cannot be dissolved out by the administration of alkalies.
6. Lithia is not a uric acid solvent of unusual power.
7. Uric acid is not an abnormal constituent of urine.
8. An excess of uric acid in the urine at any one time, or of deficiency at another time, does not indicate an abnormal condition as regards uric acid.
9. Rheumatism is not due to uric acid.

Without stopping to indicate further or in greater detail the absurdity of the theories of Haig and his followers, let us review our knowledge of uric acid and the urates and endeavor to trace their connection, if there be any, with disease.

Uric acid is a perfectly normal constituent of urine. Usually it is in solution, but it is easily precipitated by chemical means. Now, first of all, let us ask ourselves, "whence comes

this uric acid which is present in health?" And there at the very outset two theories are opposed to each other. The first one regards uric acid as a by-product of nitrogenous metabolism, an imperfectly oxidized remnant of the proteids taken as food—a "clinker" in the human furnace. This assumption fails, however, when it is brought to test; for if a human being be fed excessive quantities of nitrogenous food he excretes increased quantities, not of uric acid, but of urea. Moreover, this theory of imperfect combustion seems to me absurd because it is inconceivable that perfectly healthy bodies should with the utmost regularity fail to oxidize from 2 to 3 per cent. of their proteid output. Even more absurd does the theory become when we find that individuals placed on a diet absolutely free from nitrogenous food continue to excrete this same proportion of uric acid.

I said that the ingestion of excessive quantities of nitrogenous food increases the output of urea, not of uric acid. Do not from this take it that it is impossible by dietetic means to increase the output of uric acid. If large quantities of certain foods, notably roe, sweetbread, thyroid, etc., are ingested, an increase of uric acid excretion does ensue. This, however, brings us to the second theory as to the source of uric acid. These foods that are capable of increasing its amount are notable for one thing; they are remarkably rich in nucleins and purins. Now we know that chemically we have a series of bodies, nuclein, adenin, xanthin, hypo-xanthin, and uric acid, which represent simply successive steps in the process of oxidation. Indeed, uric acid can be formed from nuclein by simple oxidation in the open air. It seems perfectly rational, therefore, to assume that uric acid is derived from cells rich in nuclein. Such cells are found in the lymph nodes, the spleen, and the thyroid gland; but it seems improbable that the disintegration of these tissues is sufficiently rapid to produce even the amount of uric acid normally excreted. One other source there is, however—cells rich in nuclein and constantly undergoing disintegration in large numbers—and these are the leucocytes. From the latter, we believe to-day, comes a constant output of uric acid.

Strongly confirmatory of our belief is the leucocytic origin of uric acid are several facts. In all the acute febrile processes in connection with which leucocytosis occurs, such as pneumonia, septicemia, and appendicitis, there is a marked

increase in the output of urates; while on the other hand, in such diseases as typhoid and tuberculosis, in which leucocytosis is absent, this increase does not occur. The same fact holds good in connection with certain blood states, such as leukemia, in which there is enormous increase in the number of leucocytes and a much greater uratic output. It is remarkable, and has a bearing on the question as to the relationship of uric acid to gout, that in these cases there are no gouty symptoms.

A third fact strongly indicative of the hæmic origin of uric acid is the enormous amount of uric acid excreted by infants during the first five days of life. This is the period when the nucleated red cells are being broken up and replaced by the non-nucleated erythrocytes; and it seems most probable that the nuclei of the former furnish this uratic output.

So complete, indeed, is the proof that uric acid owes its origin to nuclein, and that its great source is the leucocytes of the human body, that we are justified in passing on without further consideration of that phase of the subject to another question, viz.:

Does uric acid cause gout and a variety of other diseases, or is it not simply a by-product of metabolic changes incident to gout and to a number of other diseases?

Let us examine the evidence. To begin with, it is generally acknowledged now that uric acid is not toxic. Even those who formerly looked upon it as the source of all evil are now forced to acknowledge its innocuousness, and have fallen back upon the less oxidized members of the alloxin group in their search for a cause of gout and uthenia. Careful experimental investigation, however, has shown that, while the persistent injection of these substances into the blood stream is perfectly capable of producing arterio sclerosis and renal degeneration, there is, conversely, no positive evidence that they are actually present in increased amount in the blood of the gouty. Moreover, large amounts of other nitrogenous extractives coexist with uric acid, and to them quite as much as to the latter might the production of disease be imputed.

In my opinion, the only rational view at present open to us is that which regards the so-called uric acid diathesis as a generic term for a variety of diseases which have in common one symptom, the presence of an excess of uric acid in the

urine, and which otherwise may differ so widely as to render their inclusion in a single group absolutely ridiculous.

Now, assuming that an excess of uric acid is simply an index to certain metabolic changes in the body and granting that all recent investigations point to excessive destruction of leucocytes as the source of this abnormality, our entire problem assumes a different phase. The role played by the leucocytes, the so-called "white police," in the defense of the human organism against invading micro-organisms and their poisonous products, is well known to all of us. A natural corollary is that extensive destruction of white corpuscles results either from the invasion of the blood stream by bacteria, as in some of the febrile diseases that I have instanced, or, as seems more probably the case in these prolonged and more or less chronic diseases, by certain poisonous substances, toxins. In other words, persistent excess of uric acid may properly be attributed to extensive destruction of leucocytes as the result of a chronic intoxication.

Taking gout, for instance, as the tpestriking confirmation of the belief that its manifestations are due to an intoxication, rather than to defective nitrogenous metabolism, is afforded by analogy. It is a fact that a non-nitrogenous, inorganic substance, lead, has long been known to produce every symptom and lesion, including pains, tophi, arteriosclerosis and interstitial nephritis, that is attributable to gout. Moreover, the only other substance to which the production of gout has been directly attributed is alcohol, and that also is non-nitrogenous. Certainly there is more than coincidence in these facts.

If we assume, as I believe we are forced to, that in gout we are dealing with a toxemia so virulent that it is capable of causing extensive destruction of the leucocytes, the source of this poison becomes a question of paramount importance. This problem, though not completely worked out, seems by no means obscure. For at least two thousand years the relationship of diet to gout-production has been well known, and that fact points unerringly to the intestinal tract as the source of the poison. Nowadays we see in the alimentary tract a vast chemical laboratory in which, as by-products of the processes which fit the food for nourishment, or as the results of abnormal putrefaction due to bacterial invasion, poisons of most virulent character are constantly being produced. Most of these toxins are kept from absorption by the vital activities of

the cells which line the tract; but let this vital fortress but lessen its defense, or let the virulence of the attacking poisons become so increased as to overwhelm it, and the blood becomes invaded, intoxication is set up, and in the circulation the second line of defense, manned by the leucocytes, must carry on the battle if the human organism is to survive. Many of the white corpuscles must perish in this defense, and the story of their death may be read in the uratic debris thrown off from the body.

All our experience as to the influence of diet and drugs, on gout, when properly interpreted, seems to point to intestinal putrefaction as the source of the toxemia. What, for instance, is the effect of the salines, the great classical remedies for gout? They simply sweep out of the intestinal canal the putrefying mass before its poisons can be absorbed. What of the salicylates and similar drugs? Their power is largely that of checking intestinal fermentation, and either preventing the formation or absorption of the toxins or hastening their elimination. So it is with every successful antagonist of the gouty process.

When it comes to the question of diet, was there ever a better example of the truth of the old proverb that "one man's meat is another man's poison?" Some appear to derive benefit from the exclusion of red meats or of animal food entirely, others do better without potatoes and similar farinaceous articles, many find it necessary to abstain from sweets, and yet, taking it all in all, I think we must agree that a majority of our gouty patients do best on a plain, mixed diet. Why? Simply because every such patient is a law unto himself, and will thrive best upon that diet, whatever its constituents, which lessens to the greatest extent his individual tendency to intestinal fermentation. I have no doubt that all of you have been struck, as I have, by the regularity with which lithemic patients present digestive disturbances. We should look to these as a cause, not as mere incidental symptoms.

Remember one thing: that so far as origin is concerned, uric acid and urea are as distinct as urine and feces, and that prohibition of animal foods, the source of urea, because there is uric acid or urates in the urine, is absolutely, utterly irrational. If the nitrogenous foods are found indigestible for the individual, that is another matter.

It would be possible, by elaborating upon experimental data,

to extend this paper almost indefinitely. Instead, however, I have preferred simply to indicate the trend of recent observations; and in order to lead the way to discussion, I will close by offering the following conclusions:

1. The theory of Haig, which regards uric acid as an end-product of proteid metabolism and attributes its source to the ingested nitrogenous foods, is absolutely untenable.

2. All the recent evidence points to the leucocytes of the blood as the source of uric acid.

3. The occurrence of excessive amounts of uric acid is presumably due to excessive destruction of leucocytes in the blood.

4. This excessive destruction of leucocytes may be due to actual bacterial invasion, as in the acute diseases, but in the more chronic condition is probably the result of prolonged intoxication.

5. The uric acid diathesis is not a disease. It is a generic term which covers a variety of divers conditions in which extensive leucocyte destruction leads to excessive quantities of uric acid in the urine.

6. It seems probable that the toxemia which leads to chronic excess in the amount of uric acid excreted is of intestinal origin, the result of putrefactive changes in the food.

7. The only dietetic rule in these cases should be that the foods selected must be those which are best digested by the individual.

8. Medicinal measures in the past have been successful only according to the extent to which they controlled intestinal putrefaction and prevented toxic absorption; and the problem of the future is to find still better methods and medicines for the prevention of intestinal indigestion.

PRACTICE MADE EASY.

BY J. HARMER RILE, M. D., WILMINGTON, DEL.

(Read before the Richard Hughes Medical Club, Wilmington, Del.)

IN this age of progress, many new conditions in the practice of medicine, confront the physician of to-day which he did not encounter twenty-five years ago.

But is this the age of progress in curative means and methods, or is it the age of experimentation and commercialism?

Many vagaries in the practice of medicine have come and gone, and new fads and theories have taken their places.

A few of these new things have had merit, and have come to stay, notably the anti-diphtheritic serum, which is unquestionably a most valuable curative agent in the treatment of that once dreaded disease, diphtheria.

The other antitoxines have not become so universally used as the diphtheria antitoxine.

The germ theory has appeared in the past few years, and is generally accepted as true, and yet some one may at any time prove the utter absurdity of this theory.

Restrictions, covering the qualifications of physicians for the practice of medicine, is another innovation which has come to stay. There was a time when a physician could locate and practice medicine in any state in the Union, but now, even though a graduate of an accredited medical college, he cannot practice until he shall have passed an examination before a State Medical Board of Examiners. Our Old-school brethren started this innovation, as they claimed, for the purpose of raising the standard of medical education and requirements in our medical colleges, and to protect the dear public from the quacks and irregulars, among whom they included the Homœopath, but really to protect themselves and at the same time put the Homœopath out of business. And we as Homœopaths, have been compelled to join forces with them for self-preservation. And what has been accomplished? The quacks and irregulars, the Christian Scientists and the Osteopaths, and all the other kinds, who are striving to make a living, just the same as we are, still flourish and treat the sick in defiance of all laws, and we cannot reach them and compel them to stop. Many times they cure their patients, too, when we have utterly failed. They make more money than we, and do not have to go before any State Medical Examining Board for examination, and pay a fee of twenty-five dollars or more.

There is no doubt that this legislation has raised the standard of requirements in our medical colleges, and produced better educated physicians, but it has not reached the class of people who, without any medical training whatever, attempt to treat the sick for a livelihood. On the contrary it has made it much harder for the regularly graduated physician, who has

spent his time and money in acquiring a medical education, to fit himself for the practice of medicine.

Surgery, general and special, has also made great advances, and many diseases formerly regarded as "medical diseases," have come to be known as "surgical diseases," for surgery now cures them. Specialism in practice has also grown to such proportions that almost every organ of the body has been seized upon by special advocates, who treat diseases of such organs exclusively. In fact it is a refreshing sight to behold once more the family doctor, who can treat a patient as a whole human being. When we call in a consultant from some large city, the friends of our patient say that a specialist was called into the case.

This is the age of competition and get-there methods, and the man who hustles the hardest and fastest gets there first. But the physician cannot do too much of this hustling and self-advertising, because it is undignified and contrary to our code of ethics. He must let his light so shine before men and women, too, that they may see his good and bad works, and glorify some other doctor. But there is, after all, comfort ahead for us. Our troubles are all ended and the practice of medicine is made easy for us. Where is the use of any one wasting four years of life and hundreds of dollars, not to speak of the brain and tissue waste, in acquiring a medical education? It is all unnecessary. All that is required now, is to take a number of medical journals, carefully read the directions given by the advertisers, follow their instructions, and there you are. No knowledge or fitness required. The doctor don't need to know what his sick patient is taking, the manufacturing chemist knows that. He finds out what is the right thing for a sick person to take under given circumstances and conditions, and all we doctors have to do is to obey and follow the instructions exactly. If a patient has headache or neuralgia, give him a tablet of some one of the coal-tar derivatives; if the alimentary tract is disarranged, give a germicidal tablet, and so on, and all will be well. The manufacturer has investigated all these things for us, and found the right remedy for everything, thus saving us lots of time and trouble, and all we need to know, is for what conditions to prescribe his drugs, and the patient can tell us that, and the whole thing is so easy.

This is true, for the detail man tells us so. He has the nerve to tell us to our faces that they are making the practice of medi-

cine easy for us. And I am not sure but he is right in that statement. If he finds that we are not using his firm's goods, he regards us with such a condescending look of pity and considers us slow and behind the times, not up-to-date, and doubtless wonders if we ever expect to amount to anything or learn anything. And we, intelligent, educated physicians, put up with this intolerable, unmitigated impudence. Germicidal medication is the real thing just now, and the manufacturers are keenly competing with each other, in their endeavors to get upon the market specialties which will have the run and make money for their firms. They expect and insist that the medical profession shall take them up and make them go. We don't know what these preparations are, and it is not necessary for us to know, that is the secret formula of the manufacturer.

In this day of keen competition, substitution and cheap drugs, we should be exceedingly careful how we prescribe them, without knowing clinically their effects upon the sick or well. I do not mean to say that some of these preparations do not possess merit, for doubtless some of them do, and many do not, but what I do object to is the tendency of the manufacturers to use the medical profession as a huge advertising medium for the furtherance and promotion of their own selfish commercial purposes.

Some of these firms have introduced what they claim is a new method of administering their drugs in the form of tablet triturates. To Homœopaths it is old. And they try to get our trade and want us to give up our old homœopathic pharmacies that we have dealt with for years, and use their goods because they are cheaper. We don't know whether any of the drugs are good and reliable until we try them and find them so. We have to take them all on faith, and when we find that they give the desired results, these are the goods we should use. But there is one consolation we Homœopaths do have under our system. We do have the selection of our own homœopathic remedies for our cases. While we should always be on the alert to accept any good thing in curative medicine, yet we should also be chary about accepting everything that the manufacturers offer us. We should not let go our faith and experience with our homœopathic system and its remedies, and use theirs, because we do not always get the results we expect when we prescribe homœopathically. Very often the fault is with ourselves. If we lack success in curing

our patients that are curable, and sometimes lose the clientage of desirable families, we should look about for the cause of this condition of affairs. We must early realize that familiarity with symptomatology and materia medica, and the ability to select the homœopathic remedy, though absolutely necessary in all good prescribing, are not the only essentials. We should be able to make a correct diagnosis, to know whether the diseased condition is curable or incurable, for thereon depends the prognosis. These are basic conditions which must obtain in any and all successful treatments. People want to know whether their loved ones are going to get well, and it is their right to know, and we should be able to tell them.

We have spent years of study in order to qualify as practitioners. We have elected to study the homœopathic system of medication. Why? Because we believed it to be founded upon a law of cure that was true. Do we still believe it true to-day, after all these years of practice and experience? Or is it false? Have we not all, each and every one of us, had the most prompt and gratifying results following the administration of the well-selected homœopathic remedy? Yes, many times. We should not then forsake what we have tried and found good and efficacious, but continue to seek the truth, prove all things and hold fast to that which we know is good.

Let us try to learn and appropriate for future use something which we did not know before, from each case we treat. Let us stick closer to Homœopathy, study our cases more thoroughly, our diagnosis more thoroughly, our materia medica more thoroughly, and thus better equip ourselves to meet the diseased conditions arising every day in our practice.

MORPHINISM.

BY BAYARD KNERR, M. D., PHILADELPHIA, PA.

Morphin, the active principle of opium, was discovered by Sertürner in the year 1816, and is interesting as being the first alkaloid secured.

It is prepared by the repeated maceration of opium in water, filtering, precipitating with alcohol and ammonia water, and repeating this process until purification is complete.

In its actions and uses, morphin may be said to be a typical somnifacient and general analgesic, with moderate local analgesic effects. It is a depressor of the motor spinal centres, an inhibitor of the pulse, paralyzer of respiration, a mild antipyretic, and inhibitor of general metabolism and of all the secretions and excretions except the perspiration.

Its ordinary effects on man when taken occur in nine-tenths of those who take it. There is at first a short spell of conscious comfort and good feeling; freedom of thought; bodily and mental calm; a warm, pleasant, numb feeling, especially in the fingers and toes; absence of hunger; slight dizziness and absent-mindedness; dryish tongue; indifference to slight annoyances and discomforts; diminished pupils; sleepiness, and if the desire is yielded to, sleep. Upon awaking, if the dose has been an ordinary medical one, there is more or less discomfort; slight nausea, or aversion to food; dry tongue; and the omission of the next regular stool.

The absorption of morphin when taken hypodermatically yields its first effects in from three to five minutes; the full effects in from fifteen to thirty minutes. When taken through the stomach the first symptoms appear in fifteen to twenty minutes; the full in an hour. Per rectum, to produce an equal effect, the dose must be one-third larger than that by stomach, and it takes one and one-half times as long to develop the symptoms. Per vagina the dose must be twice as large, and the time of action is twice as long.

The elimination of morphin takes place chiefly through the urine, hence the increased danger of poisoning in diminished renal activity; there is considerable excreted into the stomach and intestines, with the danger of re-absorption; some is eliminated through the liver by the bile; and a small portion through the perspiration.

One highly important point should be borne in mind, namely, that morphin checking the very excretions by which it is eliminated, accumulation of the drug renders poisoning especially liable in prolonged administration.

In its therapeutics the great sphere of morphin is to relieve pain. It is of benefit in peritonitis and abdominal inflammations, in pleurisy (though here it favors adhesions); in coughs; in surgical operations; in acute diseases, supporting the system in overcoming shock and exhaustion, but the depressing after-effect on the heart must be remembered.

The morbid condition produced by the habitual use of the drug is termed "morphinism."

It occurs in one of three probable classes of cases :—

Firstly, in those possessing the neuropathic constitution, which may be (a) hereditary, or (b) acquired.

Secondly, those who acquire the habit through the prolonged use of the drug as a sedative for pain or illness.

Thirdly, those who acquire it incidentally in social life.

Needless to say in the first class, where a defective constitution exists, the probability of complete cure is much less, and the difficulties of management consequently greater, than in those cases which may be said to have accidentally become habituated to its use.

Prescribing morphin to relieve neuralgia, tabes, dysmenorrhœa, rheumatism, and other similar painful affections has resulted in the development of a large majority of addictions to its use, and the physician cannot hold himself blameless if careless prescribing and informing the patient of the drug which has relieved him, results in the conversion of the simple neurasthenic into a victim of morphino-mania. No prescription of morphin should ever be written without an imperative order appearing above the physician's signature, forbidding its renewal. Re-filling such a prescription would render the druggist liable to prosecution, and the observance of this simple precaution would go far toward protecting the vital interests of our patients.

As if in retribution it would appear, physicians themselves are said to furnish the largest percentage of sufferers, 15 per cent.

The increase of the opium-smuggling traffic, the distributing centres being nearly every other Chinese laundry and many unscrupulous druggists, render the procuring of the drug a comparatively easy matter; the increasing prevalence of causes developing the neurotic constitution, among these may be mentioned the patent medicine craze, (in many of which, preparations of opium are actually contained) are all tending to the alarming increase of this form of drug insanity amongst civilized people.

The pleasurable sensations produced by the primary effects of the drug, bringing miraculous relief from pain and worry, merging into a state that is half sleeping, half waking, filled with pleasant hallucinations, afford a strong temptation to

many to repeat the experience whenever pain, discomfort, or mental distress is being endured. The unpleasantness of the secondary effects, general malaise, headache, dry mouth, constipation and nausea, also tend to a repetition of the dose to bring relief.

The long-continued use in small doses may not visibly affect the health or sense of well-being of the user for some years, but later the inevitable break-down occurs, and shows itself by the following symptoms:—

(Physical.) 1. Anorexia and constipation, (later diarrhœa often). 2. Cachectic anaemia. 3. Cardiac intermittence and depression. 4. Muscular weakness with tremor. 5. Myosis in the early stage; mydriasis later with sluggish pupillary reaction. 6. Impotence (amenorrhœa in women.) 7. Diminished reflexes. 8. Diminished sensibility to touch and pain. 9. Headache and localized shooting pains, neuralgias, and paraesthesias. 10. Sensation of feeling cold.

(Mental.) 1. Simple elementary illusions and hallucinations; muscae volitantes; tinnitus aurium. 2. Loss of will and aesthetic sense, irritability, moral perversion, as in alcohol degeneration, but with little loss of memory. 3. Diminished attention, incoherence of ideas, and easily fatigued intellectual powers. 4. Mendacity, and moral degeneration.

The sequel is of course complete degeneration; bodily functions and vitality becoming so depressed that a slight intercurrent ailment causes death, or the patient dies from an overdose, or the sudden absorption of accumulations of the drug within the system.

In the consideration of the treatment begin by removing, if possible, the physical cause, or painful affection if such there be, which has given rise to the cultivation of the habit.

Next, as to the method of withdrawal of the drug to be chosen. In this matter authorities differ greatly, some advocating positively the immediate or quick withdrawal, and others the slow or gradual method.

Circumstances will often decide the method of choice for us, for many patients could not afford an expensive and protracted course of rest-cure extending over a period of many weeks or months. This latter way is advised by Dr. Dercum in an article by him in Hare's System of Therapeutics, and consists in establishing full rest methods, with complete isolation, and supporting and stimulating dietetic, hydrotherapeutic, and

medicinal measures, including frequent use of hypodermics of strychnia and atropine, and this to extend over a period of three to four months, after which partial rest measures are continued for an equal time, and finally the patient instructed to retain the services of the trained nurse for several months longer to insure against relapse.

In the rapid withdrawal method we sometimes meet with the following disadvantages: The occurrence of serious symptoms when the system is deprived of the drug which has been to it both a stimulant and a support. Collapse, diarrhœa, sweating, cardiac weakness, dyspnœa, with excessive prostration; or delusional insanity, with delirium may occur, symptoms grave enough to call for a restoration of the drug. It is very doubtful if these symptoms ever would in themselves cause death, but the effect on the patient's mind and body are undoubtedly severe.

Fortunately one of the comparatively newer remedies, the active principle of hyoscyamus, seems to act almost as a specific in these conditions, and renders the rapid method very much less difficult and almost devoid of suffering.

It is absolutely necessary to support the system immediately before and during the period of withdrawal by generous doses of strychnia, by mouth or hypodermatically, and using preferably the nitrate, beginning with 1-30 and increasing if necessary even to 1-10 of a grain three times a day. This should be begun at least a week before withdrawal is attempted or active measures begun. During this time the diet should consist of nourishing broths and soups, cereals, fruit and vegetables, with the addition of white meats, fish, etc.

When ready for the active treatment, secure the services of a competent trained nurse, isolate the patient and institute full rest measures.

The dose of morphin may be reduced one-third the total amount customarily taken on the first day, and if restlessness and insomnia are marked begin sedation at once. For this purpose ammonium bromide in doses of from 20 grs. to 1 drachm, hyoscyamine, or hyoscin hydrobromate in doses of 1-200 to 1-50 of a grain, may be administered and repeated if need be every two hours until the effect is secured. The quieting effect of hot baths, hot drinks such as malted milk, should be taken advantage of. The diet must now be reduced to a

liquid one, but should be of such quality and amount to well keep up nutrition.

In the morning of the second day, and as well on the following days a teaspoonful of sodium phosphate in a glass of water is of great benefit. Continue the three daily doses of strychnia nitrate, and sufficient hyoscin and ammonium bromide to secure relief from suffering, and a reduction of another third of morphia.

On the third day it may be possible to omit the morphin completely or allowing only a small dose 1-8 to 1-4 gr. in the evening to produce sleep.

The hyoscin and bromide must be continued until the acute withdrawal symptoms show no disposition to occur, when they may be discontinued throughout the day, and given only at night in sufficient amount to promote sleep, gradually decreasing the dose, until the patient is taking no remedies except his tonic, and those called for by his symptoms.

During these few days it is not necessary to induce a state of lethargy in the patient, for the acuteness of the suffering with its multiplicity of pains, restlessness, fear, and mental anguish seem to be completely controlled by the hyoscine.

The rest methods should be continued from one to three weeks, according to the needs of the individual case and the danger of relapse, and the tonic treatment, good hygiene, regular habits and so on, insisted on until the neurasthenic and anaemic conditions have been quite overcome, and the patient finds himself again in normal bodily and mental health, with renewed ambitions, returning self-respect, and a delight in his emancipation from his former slavish condition.

In the following case is exemplified a startling possibility when the patient happens to be a diabetic. This metabolic constitutional disease is said to be favorably influenced in its course by preparations of opium.

Mrs. G., widow, age 43, well educated and refined, gives history of gall-stone colic 20 years ago, for which morphin was given. Soon after was operated upon for pelvic disease, and morphin given again, the habit contracted and continued till the present time. Is now taking 6 grs. per diem, hypodermically. Diabetes mellitus discovered fifteen years ago, and one attack of coma six years ago, and the prediction made by her physician that a recurrence might be expected within four years.

At present suffering with acute indigestion, heart weakness, loss of moral sense, and anxiety to break off the habit, before further demoralization and social disgrace occurs.

Consultation with four physicians, all advising withdrawal; one by the gradual method, the other three by the rapid one. Patient herself demanded to undertake the treatment and preferred to take the rapid course.

Very little preliminary stimulation by strychnia was given in this case, but full rest measures were secured on April 1, 1902, patient feeling comparatively well. Pulse 96, temperature 98°. Strychnia had been taken in doses of only 1-60 gr. t. i. d. during preceding ten days, morphin was then reduced about one-third, and one dose of bromide gr. 10 given before retiring on the first day.

On the evening of the second day muscular twitching, and pain in the chest occurred; one dose of hyoscine 1-100 gr., and several doses of bromide grs. 20 each had been given through the day.

On the third day morphine was reduced to 1-2 gr. t. i. d., and extreme nervousness, with pains in the calves of the legs developed. Hyoscine 1-125 gr. given. Had three doses of strychnia 1-60 gr. by hypo., and bromides 20 grs. every two hours.

On the fourth day in the morning temperature was 98°, pulse 90, but there were acute muscular pains in the limbs, very severe, and one-quarter grain morphine was given, and slight increase of sedation. In the evening temp. was 100, pulse 100, respiration 40, with unconsciousness, though tossing and restless all night.

In the morning of the fifth, urination was diminished, there was dry, hot skin, and coma had fully developed. No further medicine was given until after immediate consultation with Drs. Bartlett and Bayley. Diagnosis of diabetic coma was made, the full dose of morphin restored at once, saline infusions begun at once, and energetic stimulation to the rapidly failing heart given. The pulse at this time had rapidly risen to 180, and no hope for recovery was entertained. Infusions, hot packs, and cardiac stimulation by digitalin was continued uninterruptedly for nearly 36 hours, and a slight amount of diuresis was secured, a slight tendency toward a return to consciousness, with a fall of the pulse to 140, but almost immed-

iate relapse followed and death occurred from acetonaemia and diacetaemia.

The urine gave the positive reaction for acetone and diacetic acid. Although admitting the possible favorable influence of morphin on diabetes, both consultants expressed it as their opinion that the withdrawal of the drug was not the cause of the coma, but that the latter had been threatening for some time and had occurred co-incidentally, for the reduction of the morphine had not been carried below 1-4 gr. and on the appearance of grave symptoms had been immediately restored, with no improvement in the threatening symptoms, as would undoubtedly have occurred if these symptoms had been withdrawal ones. In any case, it is a point well worth while bearing in mind, that it may not be safe to attempt to wean a diabetic from the opium habit.

The next case represents the most favorable type of successful result and constitutes a more cheerful picture to look upon.

Mr. J., business man, aet. 28, of neurotic heredity, acquired the habit four years ago by imitation and experimentation upon himself after seeing someone else using it.

Dose is two grains, per oram, daily.

Appearance, cachectic, and sallow, with sunken cheeks; complains of heart symptoms, inability to attend to his duties. Smokes ten cigars a day, and is a moderate drinker.

The trouble for which he originally consulted me in July was a well developed chancre with bilateral inguinal adenitis, followed by a roseolar rash appearing first over the abdomen and chest. As soon as the diagnosis was thoroughly established he was given the yellow iodide in the second decimal in increasing doses, and daily inunctions of unguentum hydrargyri until his gums were "touched," when his dose was decreased one-half and continued. During this time he was prepared for the withdrawal of the morphin by taking Strychnia nitrate 1-30 gr. t. i. d., and on August 29 was admitted to full rest methods, allowed his usual dose of morphia, given his mercurial and a laxative.

On August 30th, received four doses strychn. nit. gr. 1-30, and only two doses of morphin toward evening of 1-4 gr. each, after which he slept well.

August 31st.—Developed restlessness, pains in the legs, &c. Received during the day 1-10 gr. of strychnia. Toward evening diarrhoea, sneezing, and coryza set in. Was given

hyoscyamine 1-250 gr. and 20 grs. ammon. bromide, but no morphin.

September 1st.—Fairly comfortable. Received in the twenty-four hours, three doses of hyoscyamine 1-250, three of strychn. nit. 1-30, one of ammon. brom. gr. 20, in addition to the several daily warm baths, and the morning dose of sodium phosphate.

September 2nd.—Slight anxiety, restlessness and wakefulness. Received hyos. two doses of 1-125 gr. each, ammon. brom. gr. 20, strychn. 1-10 gr.

September 3rd.—Symptoms improved, treatment the same.

September 4th.—Complains only of slight restlessness and desire to walk about the room. Treatment the same except the addition of three half dram doses of tincture of cinchona for its tonic effect.

September 5th.—Temperature during the previous five days ranged from 99° to 100, pulse from 64 to 67, and now they are 98.6° and 74 respectively. All restlessness has disappeared, feels well, and desires to go to his home. This was allowed, and he was directed to continue the three daily doses of strychn. and cinchona, and allowed 1-60 gr. of hyoscyamine at bed-time to promote sleep.

In two weeks this was discontinued, he had no symptoms, slept well, was able to work hard, had a good appetite, gained rapidly in weight, and is in the prime of physical and mental health to-day. There has been, at no time, a return of the craving for the drug, neither does he have a desire for alcoholic drinks, nor excessive smoking.

References:—Halleck, M. S., in *Medical Record*, 1903, April 11th, reports five cases of immediate withdrawal, and substitution of strychnia, hyoscin, codein, and laxatives, claiming the results were painless and quick. He says: "Strychnia stimulates all the functions depressed by the morphin—nausea, restlessness, pain, and insomnia are all cared for by hyoscine and codeine."

Dercum, in *Hare's System of Practical Therapeutics*.

White, William A., *Reference Hand-book of Medical Science, Insanity; drug habituation*.

Crothers, T. J., *International Clinics*, 12th Series, Vol. 3.

CLINICAL EXPERIENCES.

BY HERBERT L. NORTHROP, M. D., PHILADELPHIA.

(Read before the Tri-County Homoeopathic Medical Society).

I FEEL that the success of my effort this afternoon to entertain and possibly instruct you will the more easily be assured if I offer you a composite paper, or presentation of cases. The medically miscellaneous character of this gathering, and the season of the year, which has the word "vacation" stamped all over it, call loudly for a medical *tete-a-tete*, and cry out against a learned, scientific essay, or a labored disquisition upon an abstruse medical subject.

Permit me, therefore, to offer myself as the first interesting case on the program. For the past six or seven years I have been a rose cold *sufferer*. Intelligent and carefully applied internal and local treatment gave me but partial, transient relief. In June of this year, when my annual attack was at its height, and when I could not ride in train, trolley, or automobile without precipitating the usual rose cold symptoms to an exaggerated degree, Pollantin, the German hay fever and rose cold antitoxin, stepped in, aborted my attacks and cut short the annual seance by at least one month. The relief from the use of Pollantin was instantaneous and temporarily complete, and to me Pollantin was as welcome as the beacon-light to the shipwrecked mariner. I say the relief was temporarily complete, i. e., I sometimes had to use it two or three times a day, especially when I first employed it. But it was soon possible for me to wean myself from it and before I was aware, I had laid it entirely aside. Therefore, as also set forth by the few observers who have told of their experiences with Pollantin, the conclusion is that it is immediately palliative and ultimately curative as far as one season is concerned.

Dunbar, of Hamburg, Germany, has isolated an albumenoid substance, soluble in blood serum, in salt solution and the secretions of the respiratory tract, from the pollen of rye, barley, wheat, oats, and also from goldenrod, ragweed and hogweed; it appears that the poison obtained from these several sources is identical, and when mixed with an equal quantity of normal horse serum and then instilled into the eye or nose of a hay fever subject, even though at a time far remote from the hay fever season, the typical symptom-complex of the disease

will be produced. No such effect, let it be understood, will occur in an individual who has never had hay fever,—who is not pollen sensitive.

Dunbar injected this pollen toxin into animals and finally secured a serum possessing antitoxic properties. He found that by mixing this antitoxin with equal parts of the toxin, the specific poisonous action of the latter was neutralized; and that when the antitoxin was applied to the eye or nose of a subject previously poisoned by the pollen toxin, there was an *immediate* disappearance of the subjective symptoms, but a slower, though sure, subsidence of the objective phenomena.

It has been proved that a conjunctivitis, or rhinitis, produced by pollen toxin from one kind of grain, or grass, is readily and positively controlled by the antitoxin of another kind of grain, or grass. Thus it was found that the hay fever artificially produced by the pollen toxin of corn was neutralized by the antitoxin obtained from rye. This indicated the probable identity of the toxin from the various plants.

Dunbar experimented with the pollen of roses, linden flowers, wormwood, etc., plants popularly regarded as productive of hay fever, and found them incapable of causing any eye or respiratory irritation.

Although I have recommended Pollantin to a number of physicians and members of the laity, I am able to give the results in only two cases. These were long standing and aggravated, and in both the effects were positively and decidedly beneficial.

The antitoxin is sold in liquid and powder form, is all made in Germany, and costs the laity \$3 a tube.

I now take pleasure in reporting, for the first time, two cases of congenital dislocation of the hip which I reduced, with complete success, according to the "bloodless, functional, weight-bearing method" of Dr. Lorenz.

My first case was a well developed girl of four years, who was born with a backward (or iliac) dislocation of her right hip-joint, and also with a double talipes equino varus. The first effort that I made to reduce this luxation failed, probably because of my inexperience, for one thing, but also on account of the robust hip and thigh muscles of the child, accompanied by the high temperature and excess of humidity of the day, for it turned out to be one of the hottest days of last year. Within a week I made another attempt to reduce this dislocation, and

although I first produced an anterior (or thyroid) dislocation, I ultimately succeeded in bringing the head of the femur opposite the acetabulum, and the final result was an ideal one. The double talipes was operated upon later, and now both feet can be brought into a normal position and the child walks nicely with braces.

The record follows: Mary Carpenter, age four years, right buttock more prominent than left, projection being rounded, firm and consisting of trochanter major and head of femur lordosis of vertebral column in lumbar region. Right trochanter occupies higher and more posterior position than left; movements of right hip are unrestrained and free except abduction, which is limited to about one-half of normal range; the muscles of right thigh are apparently fully developed; the right lower extremity is one inch shorter than the left; the talipes of the right foot is more aggravated than that of the left.

For the operation the patient is to be chloroformed, placed upon a low table, or platform, with the hips close to the end. A folded sheet is then passed over the perineum for counter-traction, and the pelvis firmly held against the table by downward pressure.

The first manipulative step is to overcome the resistance of all the hip muscles, notably the ham-strings and adductors. Too much stress cannot be laid upon the necessity of this step, and, I was about to say, too much traction and counter-traction cannot be used in accomplishing it. The operator must bear in mind, of course, the danger of rupturing the femoral vessels if undue force is employed. After the muscles have been thoroughly stretched and all resistance overcome, the thigh is brought into a vertical position (flexion of 90°) and then abducted 90° . The latter will be found to be more or less difficult because of the adductor resistance.

Next comes a step very essential to reduction, viz., forward and upward pressure on the great trochanter, best made by using a wooden wedge, properly padded, as a fulcrum, and placed under the trochanter.

If these several manœuvres have been properly and intelligently performed, the head of the femur should now be in, or, rather, upon the congenitally shallow and deformed acetabulum, and here it must be secured in the abducted and flexed position by means of a plaster cast enveloping the leg, thigh and

waist, which is to be worn for six to nine months. An elevated shoe is then applied to the foot, and the patient made to walk and thus bear his weight upon the deformed joint, that the acetabulum may be deepened. This is why Lorenz calls it the functional, weight-bearing treatment.

My second case of congenital hip-joint dislocation I take pleasure in presenting to you this afternoon. John Howard



FIG. 1.—SHOWING RESULT OF TREATMENT OF CONGENITAL HIP-JOINT DISLOCATION.

is three and one-half years old, and is a patient of Dr. E. S. Haines. He was born with a dislocation of his left hip, evidenced by a limp, a left lower extremity 3-4 of an inch shorter than its fellow, a positive, though not marked, lordosis, and a trochanter major displaced upward and backward. His range of hip movements was good in all directions except in that of abduction.

On March 1, 1904, about five months ago, I reduced this congenital dislocation under chloroform without special diffi-

culty, and since then John has worn a plaster cast and walked freely with his extremity abducted and flexed, as you see. The cast must remain for three or four months yet. A photograph taken after its removal is here shown. This patient now walks without a limp, runs and plays as hard as any of his companions, and apparently possesses a strong and useful joint.

The Philadelphia *Public Ledger*, in an editorial, recently recalled the attempt on the life of the anarchist, Voltairine de Cleyre, a woman of considerable local notoriety, who was shot by a jilted lover and protege, nearly two years ago, and was brought to Hahnemann Hospital. Three bullets had entered her thoracic cavity, but she presented no symptoms whatever except those of moderate shock. One ball entered the summit of the right shoulder and stopped at the base of the neck above the clavicle; another passed into the thoracic cavity through the right breast, taking a course behind the sternum and stopping in the left part of the thoracic cavity; while the third bullet was fired from behind, penetrating the thoracic wall, close to the vertebral border of the scapula between the fourth and fifth ribs on the right side. This last ball, as will be seen by the accompanying radiograph, lodged quite close to the base of the heart, although its antero-posterior position, or depth, cannot be determined. No complication, not even a ripple of disturbance ensued, and Miss de Cleyre left the hospital two weeks after the shooting.

The *Ledger* editorial, referred to above, stated that Miss de Cleyre had been ill ever since the shooting. I know that her physical condition was good six months ago, and I called to see her only yesterday, and while I was told she was not at home, I was informed that she had enjoyed the best of health since her triple accident.

Of even greater interest, perhaps, will be a brief report of a case of traumatic interscapulo-thoracic amputation. John L., age 19 months, of Toronto, Canada, met with an elevator accident at the Broad Street Station, on February 16, 1904. He was received at Hahnemann Hospital in a state of profound shock, being blanched, pulseless and almost unconscious. My examination showed his right upper extremity, including the shoulder, to be hanging by *one* of the cords of the brachial plexus, *only*. The arm and forearm were unharmed. A clean-cut interscapulo-thoracic amputation had taken place, the

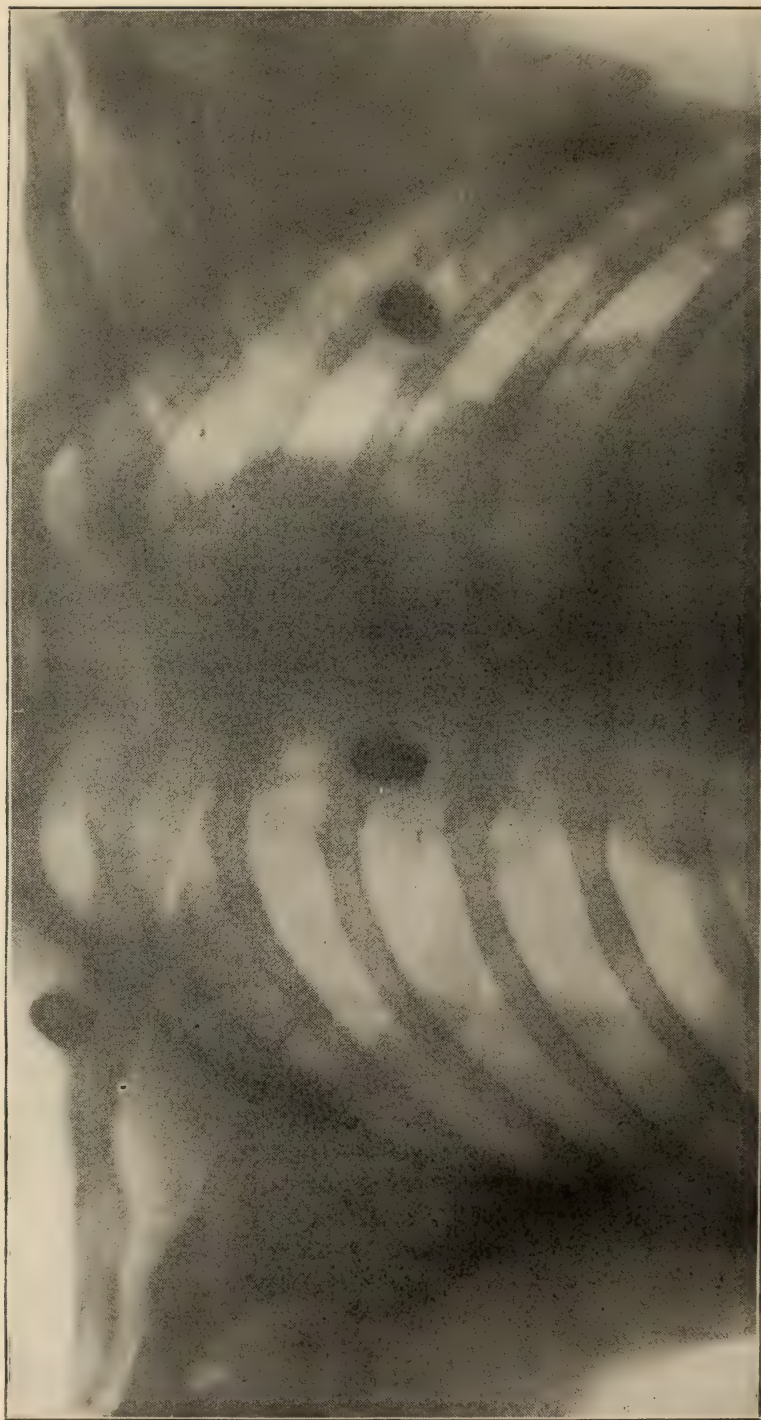


FIG. 2.—RADIOGRAPH SHOWING LOCATION OF BULLETS IN CHEST.

line of division passing through the middle of the clavicle, completely severing the subclavian artery and subclavian vein, and running along the line of insertion of the serratus magnus muscle to the thoracic wall,—in fact, all structures down to the ribs and intercostal muscles over an area measuring eleven inches long and seven inches wide, were torn away en masse.



FIG. 3.—TRAUMATIC INTERSCAPULO-THORACIC AMPUTATION—
FRONT VIEW.

There was no hemorrhage, not even from the subclavian artery, whose stump was plainly visible as it rested upon the first rib. All that I had to do to complete the thorough work of the elevator was to divide the trunk of the brachial plexus. Fearing secondary hemorrhage I picked up and ligated the subclavian artery and vein, then applied a dressing of gauze wet with saline solution. In the meantime the child's general condition had been improved by stimulation,—especially by intravenous infusion, and now he was sent to the ward with a temperature of 96° and a pulse of 170.

No complications arose and I was preparing to skin-graft the large wound (three members of the senior class of Hahnemann having volunteered to furnish the grafts), when "Little Jack," (as we called him) died early one morning without any



FIG 4.—TRAUMATIC INTERSCAPULO-THORACIC AMPUTATION—REAR VIEW.

premonitory symptoms. His death was probably caused by embolus. I speak the truth when I say that we all were glad of it, and (I believe) so were his father and mother. A glance at the accompanying photographs will tell why.

CONSTIPATION: GRATIOLA.—Tenesmus with the evacuation; sometimes with lack of results. The movement is effected only by much straining. Stool hard, scanty, tenacious, with much anal and rectal irritation; constriction and itching *in ano*. Tongue coated with sour mucous; mouth bitter, pasty, with fetid breath on waking in the morning; salivation. Good appetite in spite of the mucous-coated tongue; food tastes good. Distention of the stomach after eating; with languor and drowsiness; pressure in epigastrium as from a stone rolling about; regurgitation, nausea, vomiting. Lancinating pains in the abdomen, pinchings which force him to bend double, abdominal tympanites. Palpitation in the left hypochondrium; flatulence, with desire to vomit.—Dr. Balari. *Revista Homœopatica Catalana*.

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, M. D., BALTIMORE, MARYLAND.

BELLADONNA.

Active Ingredients.—It is now pretty certain that the poisonous action of belladonna leaves and root is dependent entirely upon the presence of the alkaloid atropia. Atropia is supposed to be identical with datura, the active principle of stramonium, and probably of other species of datura; only datura is much the more energetic of the two alkaloids.

Physiological Action.—Belladonna is both locally and generally an “acro-narcotic,” *i. e.*, it is capable of producing both narcotic and irritant effects.

Like all the mydriatic solanaceæ, *i. e.*, those which characteristically dilate the pupil, belladonna produces a number of effects which group themselves around this well-known symptom, and seem to be inseparably connected with it. Mydriasis may indeed be produced alone by acting locally upon the eye with atropia, etc.; but when it arises as an effect of the internal use of belladonna or atropia, it marks the commencement of a very definite group of poisonous phenomena; dryness and heat of the fauces and pharynx, headache, flushing of face, dimness of vision, or actual amblyopia, and (if the poisoning be carried far enough) delirium, which is often of a noisy character, with bursts of laughter, but, at any rate, always busy, and usually attended by spectral hallucinations.

It is not to be supposed that all these symptoms necessarily occur when dilatation of the pupil is produced by internal doses of belladonna; but mydriasis, caused in that way, is always a sign that the other symptoms named are at hand, and would at once follow any considerable increase of the dose.

Among the phenomena of this stage of belladonna poisoning is an appearance about which there has been considerable dispute, namely, scarlatina-like redness of the skin. That a more or less diffused erythematous flush upon the skin has frequently been noticed, is admitted by nearly all observers, but great difference of opinion has existed as to the proportion of cases in which it occurs, and also as to its persistence, and the extent to which it may spread.

The further symptoms in fatal cases of belladonna-poisoning are swelling of the face, protrusion of the eyeballs, great in-

flation of the conjunctiva, coma, and convulsions; besides which narcotic phenomena, there are usually signs of irritation in the alimentary canal, pain in the belly, nausea, vomiting, and occasionally diarrhœa, which justify the designation of the drug as an "acro-narcotic." As regards the effects of belladonna on the pulse, there is a rather remarkable conflict of evidence.

A summary of the more exact researches which have been made to determine the special physiological actions of belladonna and atropia on particular portions of the nervous centres, might lead us approximately to the following conclusions:

1. Large doses paralyze the peripheral ends of the motor nerves in striped muscles and the peripheral ends of the sensory nerves in the skin; the muscular irritability proper remaining intact.
2. Atropia depresses and in large doses paralyzes the peripheral ends of the cardiac branches of the vagus and the motor cardiac ganglia, and also depresses the irritability of the heart walls; it has no influence upon the *cardiac depressor* nerve.
3. Upon the vaso-motor nerves atropia acts in such a manner as to produce ultimate vascular dilation; but whether this is direct, or secondary to contraction, is still in dispute.
4. Atropia paralyzes the terminals of the vagus in the lungs, but only temporarily, and increases the excitability of the inspiratory centers.
5. Atropia in very small doses, diminishes excitability; in larger doses it produces paralysis in the ganglionic apparatus of the intestinal canal, the bladder, the uterus, the ureters, and possibly in the unstriped muscular fibers themselves.
6. Atropia paralyzes the restraint influence of the splanchnics on the motor fibers which perform intestinal peristalsis, while all the other muscular fibers of the intestines are unaffected.
7. It paralyzes the restraint nerves from the chord atympani to the sub-maxillary gland.

Besides the above, which are phenomena of general belladonna-poisoning after absorption into the blood, there are some local influences which require mention. The local influence of atropia, applied directly to the eye, upon the pupil, has been noticed. The dilatation of the pupil is strictly one-sided, and usually there are no phenomena of irritation. But occasion-

ally the local application causes irritative symptoms, which are apparently due to peculiarities in the subject of medication; these are redness and chemosis of the conjunctiva, erysipela-toid swelling of the lids, lachrymation, etc.

The quantity of atropia required to dilate the pupil has been estimated by several observers. Dr. H. C. Wood states that a drop or two of a solution containing 1-20 grain to an ounce of water is sufficient in many cases. One drop of such a solution would contain about 1-10000 of a grain; but as the entire drop is probably not absorbed, the actual amount of effective atropia is indefinitely less. Another author states that he has seen dilatation result from 1-20000 of a grain, and still another from 1-40000. Trousseau and Pidoux refer to an instance in which a dog's pupil was dilated for eighteen hours by the 1-128600 of a grain. Another states that he has dilated his own pupil for twelve hours with the 1-460000 of a grain. Post-mortem examinations of the bodies of persons who have been poisoned by belladonna show that putrefaction commences after death. The smell is peculiar and intolerable, and the skin is covered with livid spots, while blood escapes from the mouth, the nose, and the eyes. Should the whole substance of the berries have been swallowed, they are found to be very imperfectly digested, in consequence of the poison inducing extreme torpor of the stomach. The heart and lungs are livid; the latter are usually gorged with venous blood, and studded with black spots; and the blood itself is in an abnormal state, seeming to be dissolved.

In cases of the accidental swallowing of belladonna fruit, the first step should be to excite vomiting by means of small doses of sulphate of copper, or sulphate of zinc, repeated as often as may be needful. But care must be taken that these remedial agents do not themselves accumulate in the stomach, the torpidity of which is one of the special difficulties to contend with in belladonna cases. Sometimes the torpidity is so profound that to obtain an emetic action from the employment of any drug whatever is next to impossible, and the stomach-pump may not act well in emptying the stomach. Should the stupor induced by the poison be very alarming, it is necessary to relieve the blood vessels of the head by opening one of the jugular veins, and by cold affusions. By adopting these measures, the stomach is likewise enabled to recover in some degree from its torpor, and the action of the emetic is considerably assisted. Stimulants may also be applied to the eyes and

nose, and sinapisms to the feet; and friction may be used over the region of the heart. When by the judicious administration of emetics, the stomach has been emptied, vinegar or some other vegetable acid may be given to the patient, and be followed up with diluents and saline purgatives.

The above remarks apply chiefly to poisoning with the fruit of belladonna, which is the most common accidental form, at any rate, in country places. But where the poison taken is an energetic preparation of the leaves or root, and we have consequently to deal with atropia in such a form as must be very rapidly absorbed into the blood, it is necessary to think of possible further antidotal treatment. Under these circumstances we shall have to turn either to morphia or to physostigma.

Three drugs, at least, are supposed, on more or less convincing evidence, to be antagonized by atropia, namely, opium, physostigma, and hydrocyanic acid.

For internal use atropia is dangerous. At first the dose should not exceed 1-100 of a grain; but subsequently it may be increased with caution, to 1-30 of a grain, and in special (poison) cases even to 1-10 grain.

Characteristic Symptoms.—Furious rage, anger, disposed to bite, strike and spit at those around; to tear things to pieces.

Rush of blood to the head; pulsation of cerebral arteries; throbbing in the brain.

Intense headache; aggravated by noise, motion, moving the eyes, contact and when coughing.

Violent throbbing in the brain, from behind, forward, and towards both sides; the throbbing ends on the surface in painful shootings.

Jerking headache, extremely violent on walking quickly, or ascending stairs rapidly; at every step a jolt downwards as if a weight were in the occiput.

Frequently obliged to stand still in walking, from the violence of the pain in the forehead; at every step seemed as if the brain rose and fell in the forehead; pain relieved by pressing strongly on forehead.

Stabbing as if with a knife from one temple to the other.

Head so sensitive externally that the least contact, even pressure of the hair, gives pain.

Eyes protruding, sparkling; pupils dilated; staring look.

Eyes dry; feel stiff; heat and burning.

Dilated, immovable pupils.

Face glowing red and hot; swollen and hot.

Convulsive movements of the muscles of the face and mouth.

Great swelling and tension of the upper lip.

Dryness of mouth, tongue and throat, interferes with speech and deglutition.

Sore throat; fauces and pharynx deep red, soft palate and tonsils swollen; swallowing painful, particularly fluids; speech thick; feels like a lump in the throat which induces hawking; throat swollen outside and sensitive to the touch.

During deglutition, feeling in the throat as if it were too narrow, or drawn together as if nothing would pass properly.

Painfully distended abdomen, very sensitive to touch.

Tenderness of the abdomen, is aggravated by the least jar of the bed, or the chair on which she sits; obliged in walking to step with great care for fear of a jar.

Retention of urine, which only passes drop by drop.

Great pressing downwards in the genitals, as if contents of abdomen would protrude through the vulva.

Menses too early and too profuse; bright red blood, or thick decomposed, dark red blood.

Pulse much increased in force and frequency.

Throbbing of the carotid and temporal arteries.

Pain in small of back as if it would break.

Pains come and go suddenly, and, after a shorter or longer duration, cease suddenly.

Over-excitability of all the senses.

Redness of the whole body with quick pulse.

Smooth, scarlet redness of the surface of the whole body.

Starts as in a fright from sleep or on just falling asleep.

Sleep with moaning and tossing about, with half-closed eyes.

Therapeutic Action.—It is a maxim in the therapeutics that we may expect to find our most potent remedies among the deadliest poisons; and belladonna, which has been shown to exert such active and all-pervading poisonous influences upon the organism, affords a strong illustration of the truth of this saying. Its great energy makes it a somewhat uncontrollable remedy, even in the hands of those who have long familiarized themselves with its employment; hence by many practitioners it is seldom resorted to until other remedies have been vainly tried. The variety and certainty of its remedial effects are,

however, so well established, that its intractableness *per se* should not be allowed to weigh as an objection to its use; rather ought we to strive more diligently to discover the laws of its therapeutic action, in order that it may be employed with more promptitude and confidence. That in special cases, or in particular temperaments, belladonna may seem not to justify its ancient repute, is quite possible. But, on the other hand, there are plenty of instances in which it can be pointed to as efficacious when other drugs fulfil no good purpose. In estimating the value of a medicine we are not to judge from negatives, which are far more likely to mislead as to its virtues than positive results, when the latter are obtained under due precautions against fallacy. It is scarcely necessary to remark that hardly a medicine can be named which is invariably efficacious, and in uniform manner, even when the constitutions of the patients, and the symptoms, seem identical; and if belladonna does not at all times and under all circumstances accomplish what is justly expected from it, such failure is certainly not a defect peculiar to this remedy, or without a parallel.

One of the most characteristic effects of belladonna is its power to relieve certain kinds of pain. I say "certain kinds," for belladonna by no means ranks with opium in quality as a universal anodyne.

Belladonna in poisonous doses paralyzes the peripheral ends of the sensory nerves. Now it is a fact that the pains which we relieve with the greatest certainty by the use of belladonna are those which depend entirely or chiefly upon peripheral causes. Thus the pain of inflamed parts, especially gouty and rheumatic inflammation, can often be more speedily and effectually soothed by this remedy than by any other. And among neuralgic pains those are by far the most frequently and effectually relieved, the main source of which is some peripheral disturbance. Belladonna is much more serviceable, for example, in the various painful affections which are produced by an irritated state of the pelvic organs (especially in females) than in neuralgia of the face.

The local use of belladonna in the form of lotion, liniment, ointment, plaster, etc., has been found of eminent service in the relief of the dreadful pains of *cancer*. Dr. Phillips reports great benefit in cases of scirrhus, and also in cancerous and other painful ulcerations, from the use of a lotion composed of 2 drachms of extract of belladonna to a pint of water. the ap-

plication being made 2 or 3 times a day; and if at the same time the tincture be given internally, the sufferings of the patient are still further alleviated. The pain of scirrhus of the pylorus, a very distressing malady, has been greatly relieved by the application of belladonna plaster to the epigastrium; and both in sciatica and lumbago local application of the plaster has done much good.

The action of belladonna in relieving spasms, while very decidedly established as regards certain classes of affections, is more in dispute with regard to others. There is no doubt, for instance, that the local application of belladonna will calm spasms of particular muscles; and in this manner it comes to be of the greatest service in particular cases; as, for example, in the painful spasms of the sphincter which so aggravate the misery of fissure, or irritable ulcer of the rectum. Moreover, in spasmodic stricture of the urethra I have usefully assisted the effect of belladonna given internally by applying the fresh extract to the penis. The internal use of belladonna has a wider and more beneficial antispasmodic action; though there are very great differences in its relative success in particular cases.

The pelvic organs are an especially favored site of the antispasmodic action of belladonna, as in cases of spasm of the bladder, in which it is most useful. When there is simply much vesical irritability, with frequent micturition, without organic change, the tincture in 5 to 20 drop doses every 3 or 4 hours will give gradual but sure relief. If organic disease be present, the question of belladonna is more complicated, and a variety of individual circumstances must decide whether it shall be used.

If the allopathic school would use the homœopathic law of selecting remedies, there would be less doubt about their prescriptions.

Belladonna is useful in epilepsy, and especially when the attacks are brought on by fright.

In enumerating the circumstances under which belladonna is specially useful, it is important not to overlook *puerperal* convulsions. The value of its action in many cases of the occurrence of such convulsions I can testify. M. Chaussier, so far back as 1811, was accustomed to apply belladonna ointment to the uterus. This first and experimental employment of the drug for the purpose under consideration was followed, how-

ever, by uncontrollable uterine hemorrhage, with other perilous symptoms, and the propriety of resorting to it was warmly disputed. A better plan is to administer the tincture internally and atropia hypodermically.

In connection with this subject, I may remark that as a topical remedy belladonna is unquestionably of great service in those long-protracted and wearisome labors which arise from rigidity of the os and cervix uteri. In these cases, however, it is now seldom employed; other remedial agents usually claiming the preference.

In all hyperæmic conditions of the brain and of the spinal cord, belladonna is one of the best medicines we can have recourse to. Among many admirable results which ensue on its employment, I may specify its beneficial effects in certain congestive kinds of convulsions, especially in the fits produced by the irritation of teething. This kind of congestive convulsion may arise in various constitutions; for example it may occur in apparently healthy and robust children; and, at the other extreme of the scale, it may frequently be met with in scrofulous and feeble children, with precocious development of cerebral activity; but, in fact, it may occur in all shades of temperament.

In all these varied circumstances—granting a congestive origin—belladonna is of the highest possible utility; and its employment cannot be too highly recommended.

So with convulsions referable, proximately, to whooping-cough, and which often depend, like the former, upon a congested condition of the brain. In these, just as when induced by the excitement arising from dentition, belladonna rarely fails to give relief.

The very unpleasant nocturnal enuresis, to which children are so liable, is very usefully treated with this drug; but it must be given in large doses, namely from 10 to 20 drops of the tincture thrice a day according to Ringer.

Besides its power to relieve functional affections, belladonna exerts a powerful influence over certain actual tissue diseases. Many forms of inflammation are amenable to its power, and among these may be mentioned certain diffuse inflammatory affections of the skin.

In cases of erysipelas, when the skin has been of a deep red hue, with accompanying heat, pain, and swelling, and when the constitutional disturbance has been considerable, Dr. Phillips

has administered this medicine with results that were perfectly satisfactory. Erysipelas exhibits itself under a diversity of forms, and is not amenable to any uniform mode of treatment. It becomes important, accordingly, that we should carefully note which of the forms give opportunity for the wise employment of belladonna,—since I by no means wish it to be supposed that I am recommending belladonna for erysipelas without reservation. The form in which belladonna may be employed with advantage are such as are marked by superficial inflammation, that is to say, which does not much affect the subcutaneous areolar tissue, and in which the surface is free from vesicles. When these are the conditions, belladonna will rapidly quell the disorder. So when erysipelas attacks the brain, the power which this drug exerts in abating the delirium, and in promoting the quick subsidence of the disease, is manifested so energetically, and in so short a space of time, as to be quite astonishing. In erysipelas of a phlegmonous character, before suppuration or sloughing takes place, belladonna is likewise of considerable service.

Let me now speak of belladonna in connection with sore throat. In all those forms of inflammatory sore throat which have a prelude of more or less fever, with pain, redness, and swelling of the tonsils, and which are attended by difficulty of deglutition, belladonna operates with surprising efficacy.

Catarrh of the bladder is another complaint which is very successfully treated with belladonna, the good effects being remarkable and permanent. The cases have been recent ones, and, where the medicine has shown itself to be most efficient, they have been such as have resulted from a chill, and have been attended by more or less pain of an undefined character in the hypogastric and perineal regions, and by frequent and painful micturition. Notwithstanding the severity of the symptoms ordinarily attendant upon this malady, belladonna overcomes them. The perinæum may be smeared, night and morning, with a small quantity of the extract, the external effect well supplementing the internal one. Belladonna will also relieve the violent contractions of the muscular coat of the bladder which so frequently accompany diseases of this organ. When the bladder is simply in a state of great irritability, and micturition is both frequent and painful, but where no organic change has taken place, belladonna will soon bring relief.

The early stages of encephalitis, and during the whole period of excitement, belladonna again shows its powers to advantage; the severe headache is relieved, the suffusion of the eyes is diminished, the delirium abates, and the nausea and vomiting are often rapidly subdued. Light and sound at the same time become less distressing to the patient, and the general result of the employment of the medicine is that the attack does not lead, as otherwise it probably would, to a state of great prostration, accompanied by unmistakable typhous symptoms. Usually, also, there is a complete absence of certain symptoms which ordinarily characterize the later stage of the disease, and some of which are occasionally manifested in the early one; namely, muttering delirium, strabismus, tremors, twitchings of the muscles and incontinence of urine. In spinal meningitis, as a matter of course, (the membranes being continuous with those of the brain), corresponding results may be confidently anticipated.

In cases of inflammation of the spinal cord and its membranes, when brought on by external violence, I rely strongly on the efficacy of belladonna. While the medicine is in course of operation internally, a belladonna plaster should be applied to the injured portion of the spine.

In the early stage of pneumonia, and in acute nephritis, belladonna has frequently proved useful. It has been successfully employed in iritis. Taken internally in iritis, and used as a lotion 3 or 4 times a day, in the proportion of one drachm of the extract to 4 ounces of water, belladonna not only dilates the pupil and breaks down the adhesion, but subdues the inflammation, helping in a two-fold manner to correct the mischief.

Belladonna is not merely useful in ordinary inflammations, but has a remarkable influence over ulcerative processes of various kinds. The extract, locally applied, will heal irritable ulcers of the rectum and fissures of the anus; or, if it fails to accomplish this end completely, it will, at all events, greatly mitigate the pain and trouble which arise from them. In fissure, the purpose may be accomplished in an easy and very satisfactory manner by passing a small portion up the back part of the rectum, the operation being repeated night and morning. For the removal of the ulcer the tincture should be administered internally, and the extract be smeared in small quantity upon the affected surface.

Belladonna is also an excellent agent for the mitigation, and even for the complete removal of the acute and burning pain which so constantly follows defecation, when there is ulceration of the nature just described; it likewise prevents the recurrence of the distressing spasms of the sphincter ani to which the patient is subject. If it fails when used alone, to heal the fissure, or to remove the ulcer, the extract of belladonna should be combined with mercurial ointment in equal proportions. The mercurial ointment, employed alone, does not exert the same salutary effects, nor is relief obtained so readily as when combined with belladonna. Both these last observations will apply also to chronic ulcerations of the rectum, arising from secondary syphilis; that is to say, while for such ulcerations mercurial ointment, employed alone, is of only limited utility, the mixture with it of an equal quantity of belladonna generally gives excellent results.

In recent induration and inflammation of the breasts, very remarkable effects are produced by belladonna, in consequence of its action in arresting secretion. Among the most practically useful of these is its influence in arresting the suppurative inflammation which is so common in women who have been obliged suddenly to give up nursing. The local application of the ointment, or the fresh extract, together with the internal use of 5 to 10 drops of the tincture, 3 or 4 times a day, very quickly relieves the distension and congestion, if the treatment be adopted sufficiently early.

Not only in inflammation, but in certain kinds of fevers, belladonna is of great service.

Typhus fever gives occasion for the useful employment of belladonna. In the early stages of this formidable disorder, with its accompanying delirium, sleeplessness, painful sensitiveness to light and sound, and liability to convulsions, belladonna will reduce the severity of the symptoms. No medicine that I am acquainted with can be so thoroughly relied upon for averting the disastrous consequences which usually follow these head complications. One of the very special phenomena attending the exhibition of belladonna in typhus is seen in the altered condition of the tongue. From being red and glazed, or dry, brown and cracked, sometimes destitute of the least trace of moisture, the tongue of the patient suffering from typhus becomes, under the influence of belladonna, moist

around the edges, if no farther, and, under favorable circumstances, absolutely wet in every portion.

Finally, I may allude briefly to several other disorders in which have been proved the efficacy of belladonna, but respecting which there is no need for extended remarks.

One of these is *delirium tremens* accompanied by congestion of the brain. Another is *gout of the stomach*.

Belladonna has been much employed in whooping cough, and with tolerable success, but the useful action of many other drugs is manifested more readily. Belladonna relieves the congestive irritability of the respiratory passages; also the determination of blood to the head—both such common accompaniments of whooping-cough.

As a *prophylactic against scarlet fever* the more advanced leaders in the allopathic school acknowledge its efficacy, and one of them, Dr. Phillips, quotes Hahnemann as the promoter of this use of belladonna.

We will now take up the very important subject of the antagonism between belladonna and other physiological agents. Three drugs, at least, are supposed, on more or less convincing evidence, to be antagonized by atropia, namely, opium, physostigma, and hydrocyanic acid.

The antagonism between belladonna and opium first began to be spoken of some 36 years ago, and from that time to the present, there has been a steadily accumulating influx of affirmative evidence, intermingled with occasional attacks tending more or less to throw discredit upon the fact asserted. At present the state of the case is such that doubt seems no longer possible. Life has been saved by the use of belladonna under circumstances of severe opium-poisoning, and belladonna-poisoning has been relieved by opium.

Much more decidedly is the antagonism between belladonna and Calabar-bean (physostigma). The one substance counteracts the action of the other; and the result is a physiological antagonism so remarkable and decided that the fatal effect, even of $3\frac{1}{2}$ times the minimum lethal dose of physostigma, may be prevented by atropia.

Even more interesting than either of the above-named antidotal actions of atropia is the power of antagonizing hydrocyanic acid. Preyer discovered that prussic acid kills by embarrassing the heart and respiration; and that this effect is produced by an intense irritation of the inhibitory cardiac, and the

pulmonary branches of the vagus. Atropia possesses the power of antagonizing these, and the result of this paralysis is to re-excite the action of the heart after it has been stopped by hydrocyanic acid. It is needless to say that this can only take place when the administration of the atropia is not too long delayed; so that the promptitude it calls for must often hinder the practical usefulness of this remedy. The dose of atropia recommended in hydrocyanic acid poisoning is 1-75 grain, which should be subcutaneously injected; at the same time we should resort, at once, to artificial respiration, without waiting for the action of the atropia, which must occupy some time, be it ever so little.

With the single exception of opium, there is probably no vegetable medicine so important as belladonna in existence; and there seems a probability that many purposes to which opium has been applied will hereafter be found more efficiently discharged by belladonna.

For internal use atropia is dangerous. At first the dose should not exceed 1-100 of a grain; but subsequently it may be increased, with caution, to 1-30 grain, and in special (poison) cases even to 1-10 grain.

The regular allopathic doses of belladonna are as follows:

Tinct. belladonna, mv-xxx.

Extract belladonna, gr. 1-10, 1-2.

Fluid extract belladonna, mj-v.

Atropiæ sulphas, gr. 1-125, 1-65.

They also employ belladonna ointment, belladonna suppositories, and belladonna plasters.

In the next lecture we will take up the homœopathic uses of belladonna.

HEMORRHOIDAL REMEDIES.—If the cause be stasis in the upper abdomen, *Podophyllum*; if in the lower abdomen (plethora abdominalis) with heaviness, fulness, heat, slow digestion, scanty urine, headache incapacitating for work, piles swollen but not bleeding, *Sulphur* and *Nux Vomica*; if with congestion of the pelvic organs, as is often the case in pregnancy, *Aloe* (*Collinsonia*); if hemorrhoidal colic accompany uterine obstruction, *Sulphur*, *Aesculus*; if there be rectal varicosities only, without abdominal plethora, but with profuse bleeding, *Hamamelis*.—*Allegemeine Homœopathische Zeitung*.

EDITORIAL.

OVERWORK AS A CAUSE OF PREMATURE DEATH AMONG PHYSICIANS.

GREENE states in his recent work on "Life Insurance Examination," that, judging from the tables of relative mortality, the doctor must be considered a poor risk. The elaborate tables published by Tatham show that the comparative mortality figure for medical men was 966, as against 821 for lawyers, 533 for clergymen, and 953 for occupied males in the aggregate. Data taken from the Supplement to the "Fifty-fifth Annual Report of the Registrar-General," indicates that under two very important headings, "Phthisis" and "Accidents," the mortality among physicians was much lower than among the male population as a whole. On the other hand the mortality among physicians from diseases of the nervous system, the circulatory system, the kidneys and from suicide is very high, and that from gout and diabetes is more than three times as great as the average among males in the aggregate.

In considering the cause of premature mortality among medical men, we observe at once that it is not due to accidents or to the infectious diseases with which they commonly come in contact. In both of these classes we find the mortality among physicians is lower than the average. When we come to degenerative diseases, however, we find the reverse to be the case, and diseases of this nature are undoubtedly *the* important factor in producing the high mortality among practitioners of medicine. The career of almost any practitioner of medicine furnishes abundant reasons why the doctor should be especially liable to degenerative diseases. As Greene truthfully says, "the physician in general practice is never rested, his mind never free from care and worry, his emotions are kept almost constantly in play, his sleep is broken, his hours for meals are irregular." It is this constant strain and anxiety, together with the frequent necessity for active mental and physical exertion after the labors of a busy day when the

body should be at rest, that robs the nervous system of proper time for reconstruction and recuperation, and that overloads the blood with irritating toxins, readily capable of producing arterial changes and degeneration of the parenchymatous organs.

It being evident that overwork and worry are the important factors in causing premature mortality among physicians, the question that concerns us practically is whether there is any way of preventing this premature mortality. While we do not believe any plan can be formulated which will relieve physicians of all their cares and discomforts in life, we are confident that there are well defined principles of action, which if carefully followed out, will prolong the years of a physician's life, as well as make his years more fruitful to himself and others. These principles are: *first, systematic arrangement of work; second, rest; third, avoidance of worry.*

In these days when so much money is expended by business men in order to systematize their work, it would be superfluous to urge upon the members of a learned profession the advantage and economy of method in working. A man spends his life in living and he who is wise will endeavor to manage his expenditure so that nothing will be wasted. He will realize that however hard his day's work, it can be accomplished much easier by method and arrangement, and by refusing to break from these except for very pressing reasons.

Rest is necessary in order that those constituents of the cells which have been used up during physical or mental activity may be repaired and replaced. Maschek has quite firmly established the fact that the time occupied in strenuous effort cannot greatly exceed one-third of the twenty-four hours without injury to the human organism. It is easy to point out notable exceptions to this rule, but experience has shown that it is far easier to exceed the powers of the human economy than to husband them. To obtain the full benefit from rest, there must be complete relinquishment of effort, both mental and physical, when the time for cessation from work has arrived. Sleep is the most perfect form of rest, and in the vast majority of individuals the time devoted to it cannot be curtailed to less than eight hours without serious injury both to the work and to the worker.

It has been well said that more men are killed by worry than by work. The avoidance of worry is one of the most import-

ant, as well as one of the most difficult conditions to attain in order to preserve one's health and to prolong life. It is useless for us to attempt to excuse ourselves by saying that our disposition is such that we cannot avoid worrying. If this be true it is our misfortune. The law of the survival of the fittest is inexorable. Worry unfits a man for effective work and a long life. He that expends his vital energies with constant worry and anxiety is unfit and must pay the penalty by premature degeneration and death. If we are to attain any lasting success in the practice of medicine we must cultivate our minds to dismiss from thought all questions concerning which we have once arrived at a conclusion. Having made a diagnosis or instituted a method of treatment in a case, we must calmly wait until sufficient time has elapsed for new developments to indicate whether or not our diagnosis has been correct or our treatment judicious. Sir William Jenner once said, "I don't think that anxiety about a patient ever kept me awake for five minutes in my life. I go to a bedside. I do my best. What more can I do? Why should I not sleep?" These words no doubt explain the fact that in spite of the hard work and heavy responsibilities with which his life was filled he lived to the age of eighty-three years. Having done our best our duty to the patient and to ourselves demands that we should secure proper rest and sleep, and thus refit our minds for the labors and responsibilities of another day.

THE DISHONESTY OF A PRESCRIBING OPTICIAN.

THE following instance of an optical charlatan has been brought to our notice: A certain aged lady was recently waited upon by a man who represented himself as the oculist of her husband long since deceased, and begged the privilege of examining her eyes, and correcting any difficulty that might be present. The request for an examination having been granted, the optician announced that the eyes were in terrible condition; that blindness from cataract was impending; and that by his skill he could save the old lady her sight. Wrought up to a state of extreme worry the patient consented to having the proper (?) glasses made for her.

The old lady had an attendant of uncertain years, and it was suggested that the "optical" majesty examine her eyes also.

Again he discovered a pair of eyes in terrible condition. Blindness so complete that the blackness of the darkest night was no circumstance to it must ensue unless his glasses were worn. Again he found a ready dupe. He departed from that household with thirty-three dollars of cash, leaving behind two pairs of glasses that subsequently proved to be worse than useless, for they could not be worn by either party without causing discomfort or pain.

While the above is of course an extreme case, numerous other examples of optical humbugs might be instanced. Unfortunately, many of these dupe physicians as well as the laity. Some even thrive through the endorsements of physicians to whom they pay commissions in return for patronage. The general practitioners who have become confederates of such opticians are not fully aware of the crime they are furthering. Not only are eyes ruined by such charlatans, but the dignity of the medical profession is lowered; the respect of the laity for medical practitioners is destroyed.

The optical rogue is everywhere. That he should fool the people is not so surprising; that he should deceive medical men is astounding. We ourselves have seen a man standing behind a grocer's counter one month; the next month, he was an examining optician in a department store.

It is a pity that the medical laws of the State cannot be so amended as to make such practices illegal. People may say the profession is jealous of the practice secured by these parties. Why should we be jealous? There can be no doubt that for every dollar thus taken from the medical profession, ten more are received by reason of the harm done to many eyes.

That New York has its troubles is shown by the following clipping from the *Post-Graduate*. We reproduce it as it may afford our readers amusement:

A STRANGE OPTOLOGIST.

EDITOR POST-GRADUATE:

I received a circular from a Mr. —, who calls himself an optologist. Enclosed in the letter was a test card published especially for the use of the profession. This optologist invites me to see his dark room where he uses his luminous electric ophthalmoscope, saying that if I had not yet seen his New York offices I have missed something.

All this is so confounding to me that I wish to ask you to give a solution of the conundrum this circular presents. I happen to know a little Greek and Latin, but I never heard the word optologist. However, it can mean nothing else but a wise cook, for *optos* is roasted or cooked; *opto* means to roast or to broil; an *optaneion* is a kitchen; *optiticos* is somebody who understands to roast to perfection, and optologist must be a wise roaster. Our optologist, this Mr. M——, however, instead of giving me a bill of fare, invites me to a dark room and talks of things which have no relation to roasting or broiling. Can you explain?

A. ROSE.

Evidently the writer of the above must be an experienced "optologist," judging from the way he has succeeded in roasting a quack.

FRAUDULENT PHARMACY.

NOT many evenings since there called upon us a detail man representing a certain firm of pharmacists. He wished to interest us in a preparation, which he alleged contained one per cent. of an organic salt of iron. He was particularly anxious that we should have it introduced into hospitals with which we are connected. He made wonderful claims for his stuff. It had, he said, in one case brought the heamoglobin from 50 per cent. to 95 per cent. in the short time of three weeks. He exhibited certificates from some hospitals, and claimed an ability to produce others from hospitals in New York and elsewhere. It made the administration of iodide of potassium a very simple matter. If salicylates were given in conjunction with it, the phenomena of salicylism would be impossible. After listening to these claims with considerable amusement, we took some of the preparation, and tested it with ferrocyanid of potassium. We obtained no blue reaction. But wishing to be fair, we then evaporated some of the tincture to dryness; triturated the charred residue in a mortar with muriatic acid; added a little water, then nitric acid; and then half an ounce of water, bringing the total bulk up to the quantity evaporated. Then we applied the ferrocyanide test again, and the result was negative. The agent alleged the tincture to be free of tannin. We then

added one drop of the tincture of perchloride of iron to his preparation, and obtained a well defined inky reaction, showing without question the presence of tannic acid.

The circulars praising the drug in question in no place state that it contains any iron; but they nevertheless allege wonderful results, such as we usually expect to obtain from legitimate preparations of that remedy. The agent expressed himself as surprised at the results of the testing, which was made in his presence. He told us that he had only acted under instructions in telling his story, and that he was no chemist. He promised to write within a few days. Sufficient time has elapsed for him to keep his promise; but he has failed to do so.

The above incident well illustrates the danger to which we, as a profession, are exposed. It tells us in unequivocal language that there are concerns in the country capable of perpetrating any fraud upon the sick for the purpose of making for themselves a few paltry dollars. It tells us that we as a profession are too confiding in trusting unknown pharmacists, were it not so, such concerns would not have the boldness to march into our offices with the absurd tales they deal out to us.

The fraud perpetrated should be punishable by imprisonment. Unfortunately, it is managed with such consummate skill that we seriously believe if legal action were instituted that the plaintiff would be laughed out of court.

THE INSTITUTE OF DRUG PROVING.

The most important action of the sixtieth annual session of the American Institute of Homœopathy was the step taken toward the establishment of an Institute of Drug Proving. The object of this Institute is to make a persistent and systematic study of drug action, especially of the effects of drugs on the human body, and to present the knowledge thus gained in such form as shall make it useful in the practice of medicine, regardless of schools.

Such investigation as this is urgently needed. Many of our own provings were made over a half century ago, and fail in many respects to measure up to modern requirements. The allopathic school in their investigation of drug action have confined their experiments largely to animals, and much of their supposed knowledge of the physiological action of drugs

on human individuals is either inference or conjecture. To quote the letter of the Committee on Drug Proving, "Many facts showing the absolute disregard of the important study of remedies for the treatment of disease afflicting man have come to light. \$17,915,075 were donated in 1902-'03, by private individuals, entirely exclusive of Government and State aid, for educational institutions of the country. . . . There is no record showing that any part of this amount was devoted to the original investigation of the effects of drugs."

The establishment of the proposed Institute of Drug Proving will mean to the homœopathic school the development of new remedies, the filling out and perfecting of the pathogeneses of older remedies, and the establishment of the homœopathic materia medica on the firm basis of modern scientific investigation. Its benefits, however, will not be confined to our school alone, but will permeate the whole realm of medicine, and enlarge and strengthen the powers of physicians for the relief of suffering and the cure of disease.

The notable decrease in the number of students in homœopathic colleges during the past few years has been the subject of much discussion and much concern. Some explain this condition by saying the law of "similars" has proved a failure and is about to be abandoned, while others insist that the decrease is due to the fact that our colleges do not teach enough materia medica and "pure homœopathy." We venture to affirm that both of these explanations are incorrect. The reason students are no longer attracted to the homœopathic profession is, that as an organization we are no longer aggressive contributors to medical science; we are no longer constructive workers. Contrast this with the activity of the members of our school during the earlier days of homœopathy. Then we see Hahnemann alone, proving with indefatigable labor over eighty drugs. Following his example came Hering, Dunham, Hale and numerous others, through whose labors and studies reproving and new provings were constantly being added to our knowledge of materia medica. Every homœopathic physician was an enthusiastic investigator of the effect of drugs on the human body, and almost every student was a prover. It may be objected that in their zeal these early advocates of homœopathy inserted into the materia medica many symptoms which were useless or fanciful. We grant this to be true, but we also assert that the success of the homœopathic

profession in the past is traceable directly to their work and influence, and that their labors have proven a substantial boon to humanity. No "sect" or "school" long survives the period of its utility. If we are to keep step with the onward march of medical science we must do our share of the work.

Therefore, as a more intimate knowledge of the action of drugs on the human economy is so urgently needed, and as we are by tradition and experience, so especially adapted to supply this knowledge, it would seem to be a most opportune time for the homœopathic school to carry out this investigation, thus demonstrating to the profession and to the public that we are still active and useful members of society. Should we successfully conduct such a work as this, there need be little fear of homœopathy dying out.

If the American Institute of Homœopathy is to enter upon this work properly, the co-operation and united effort of all its members is necessary. There may be many differences of opinion in regard to the most efficacious potency and mode of the American Institute of Homœopathy and the members of the Committee on Drug Proving are men whose zeal and ability for carrying on this work cannot be doubted, but they can accomplish little unless they have the co-operation of the individual members of the homœopathic school. Those who are unable to make any financial contributions themselves should endeavor to interest wealthy or philanthropic patients with whom they come in contact in this most practical and worthy cause. Let us all lend our aid in carrying on this important task, that the labors of the American Institute of Homœopathy may stand side by side with the work of Hahnemann and his contemporaries, as an imperishable boon to humanity and a monument to the homœopathic profession of America.

GLEANINGS.

THE ABUSE OF WATER DRINKING IN DISEASE IS DISCUSSED by *Morris Manges*. He says that it not infrequently adds to the burdens of an already taxed heart and circulation, and augments the embarrassment of organs we are striving to relieve by allowing too free use of water. Taken in small quantities, hot water raises the pulse-rate and lowers the blood pressure; cold water diminishes the pulse-rate and raises the blood-pressure; lukewarm water lowers the blood-pressure. Water at ordinary temperature (60 degrees) has very little effect. These effects cease in about twenty minutes. They are due to the influence exerted upon the vasomotor centers rather than to the dilution of the blood. The greater the quantity of water above 200 cc. the greater the effect upon the bloodvessels. Diuresis does not depend upon the quantity of water introduced into the body, but upon the blood-pressure in the kidneys. He states that the practice of simply directing the patient to drink as much water as possible, as is so often done, without considering the condition of the heart, circulation, and kidneys, cannot be too strongly condemned.—*American Journal of Physiology*, December, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE PRODUCTION OF CHOLIN FROM LECITHIN AND BRAIN TISSUE.—*Ceriate*.—The discovery of the poisonous ptomaine in the cerebrospinal fluid in various forms of functional and organic nervous disease, has led many to attribute to cholin some casual connection with the disease. Whether this the case or not, will be determined by investigations in the laws that underlie the production of cholin in the body. Cholin may be produced by the putrefaction of lecithin, and also by the putrefaction of brain tissue. There is an enzyme present in brain tissue capable of splitting cholin from lecithin. This enzyme acts only in neutral or slightly alkaline media, while an acid medium inhibits it. This is exactly opposite to the case with the protolytic autolysis of brain tissue which is favored by acid and inhibited by alkali. In the body the action of the enzyme is favored by the normal alkaline reaction of the nerve-substance and cerebrospinal fluid. The ease with which the enzyme acts is probably explained by the fact that the lecithin in the central nervous system, as in the stroma of red blood-corpuscles, is not in a chemical combination, but in an emulsiform condition and is therefore capable of mechanical solution. The enzyme can be destroyed by heating, and then, if the suspension of the brain tissue be kept absolutely sterile, cholin is produced; if putrefaction is allowed to supervene, cholin will be formed in a greater quantity than by autolysis alone. As with the other enzymes, there is an inhibitory influence of reaction-products. Efforts to isolate this enzyme have so far been unsuccessful. *American Journal of Physiology*, December, 1904.

WILLIAM F. BAKER, A. M., M. D.

DANGERS FROM INDISCRIMINATE USE OF CATHARTICS IN ACUTE INTESTINAL CONDITIONS.—*Harris*.—In considering the numerous affections of the abdominal organs accompanied by an suspension of the bowel, it should be understood thoroughly and never forgotten that no person dies simply because there is no action. It is a well known fact that there may be no action, and yet no symptoms, but let the intraintestinal current be suddenly arrested by some acute affection the patient is brought to a very low and serious condition and if this continues it is very evidently stamped on the patient's face. This bowel condition we recognize as "Facies Hippocratic." Cathartics may be considered as acting in two ways: (1) By stimulating the peristalsis, and (2) by increasing the amount of fluid in the intestinal tract.

Where there is a complete closure of the lumen of the bowel such as occurs in hernia either external or internal or obstruction of the bowel by reason of adhesions or any other strangulation, it is very evident that no cathartic however strong, is capable of overcoming obstructions. Under these conditions, its use is positively harmful. The portion of the intestine which is full of fluid in which putrefactive changes are constantly taking place and intestinal contents being churned back and forth and finally not being able to pass the obstruction, is forced in a reversed direction back in the stomach, giving rise to vomiting. The stimulated bowel forces the intestinal contents against the obstruction increasing the strangulation and hastens the sloughing from the bowel at that point.

Referring to the case where intestinal obstruction is due to the paralysis of the intestinal wall, such as occurs in localized inflammatory conditions from some unknown cause, recovery will be brought about by medical treatment.

In closing the writer calls attention to the following as being the most important: (1.) An accurate diagnosis of the condition before the use of any cathartics. (2.) Cathartics are decidedly harmful in obstructive diseases. (3.) A protest is made against the use of cathartics in surgical conditions. (4.) Placing the intestinal tract at rest as much possible. (5.) Lastly to operate on cases as soon as the diagnosis can be made.—*The Journal of the American Medical Association*, February 25, 1905.

WILLIAM F. BAKER, A. M., M. D.

HEART COMPLICATIONS IN DIPHTHERIA.—A Clinical Study of 946 Cases.—*Franklin W. White and Howard H. Smith* give their clinical observations of nearly 1,000 cases of diphtheria treated at the Boston City Hospital during one year. The cases were studied principally to determine the character and frequency of heart lesions and their practical importance in prognosis and treatment.

About five per cent. were less than one year of age, 40 per cent. less than five years, and about 70 per cent. less than ten years old. In one-quarter of the cases the illness was severe; more than one-half of these, or 132, proved fatal. Only a fourth of the deaths were from heart complications; the most frequent cause was broncho-pneumonia following intubation or

tracheotomy. These facts are opposed to Villy's statement that the majority of fatal cases of diphtheria die on account of heart complications.

The patients came mainly from the poorer classes, where treatment is likely to be deferred, so that most of them did not receive antitoxin until the second or third day; and of the severe and fatal cases, at least two-thirds were four, five, or more days without antitoxin treatment.

The symptoms and physical signs of cardiac disturbance are treated at length. About 60 per cent. of the cases showed irregularity of the pulse. This sign was more frequent in the younger patients, and was observed in the severe, moderate and even mild cases. It was very variable in its appearance and duration. The rhythm would change from marked irregularity to perfect regularity often within half an hour.

The number of patients with heart murmurs is a striking feature of the study: 878 had heart murmurs at either the apex or base, or 94 per cent. of the cases where the condition of the heart was carefully observed and recorded. These murmurs were not faint or doubtful, but for the most part were loud and blowing, and in each case were confirmed by two or three competent observers. The murmurs were all systolic in time, with the exception of those in a few cases of chronic heart disease. They were usually hard at the apex, frequently transmitted to the axilla, and associated with accentuation of the pulmonic second. The majority were accompanied by irregular heart action and outlasted the fever. In 90 per cent. of the patients with murmurs, this sign was present upon entrance to the hospital, and in about 87 per cent. of the cases one or more murmurs were present at discharge. The duration of murmurs after leaving the hospital is unknown, except in a few instances. Five or six of the patients were examined some eight months after this discharge, and each showed a murmur; two of these, in addition, having cardiac enlargement and evidence of myocarditis.

As to prognosis, the author believes that the mere presence of a murmur has little value, as the sign is so nearly universal.

The clinical course of the cases does not explain the cause of these murmurs. Pathological studies show that they are probably due largely to relative mitral insufficiency resulting from changes in the heart muscles, or to changes in the innervation of the heart. Autopsies have shown that endocarditis and pericarditis are extremely rare complications of diphtheria. Cardiac enlargement was infrequent, and was found only in the severe cases. The writers believe that the frequency of acute dilatation and syncope has been exaggerated, as almost all of their fatal cases showed a gradual heart-failure. They agree with Poynton that dilatation of the heart is not so marked in diphtheria as in rheumatic fever.

In the patients with chronic heart disease, 17 in number, the course of the illness was no more severe than in the average patient.

The cases with heart complications are divided into three separate types. The first and most serious type have gallop rhythm, vomiting, epigastric pain and tenderness, run a short course of two or three weeks, and die in the majority of cases. The second type lasts for weeks or months, with a rapid, regular, or irregular heart, easily affected by slight exertion, and gradually becoming normal in rate. There are a few other important symptoms. The third type is rare: its main feature is very slow

pulse, occurring at the end of the second or beginning of the third week. There is a marked decrease in rate over a period of three days, the pulse dropping from 110 or thereabouts to 30 or even 20. The subjective symptoms are slight until the pulse reaches a low level (40), when signs of prostration set in. The sounds are weak, and a moderate degree of dilatation occurs. There are three such cases in the series, all fatal; 36 of the cases were considered as having serious heart complications. Two-thirds of these patients died. Four-fifths of the fatal cases had no treatment until after the fourth day.

The most important cardiac symptom is gallop rhythm; this was found in all of the 36 cases. The murmurs usually become indistinguishable upon the appearance of this symptom.

Late vomiting is the next important symptom. It was present in all but four of the fatal cases. In nearly every case the appearance of the gallop rhythm preceded the onset of vomiting from one to four days.

The next symptom is epigastric pain and tenderness. Nine-tenths of the patients who had this symptom died. This symptom usually was closely associated in time with the appearance of vomiting, either a day or two before or a day or two after.

Palatal paralysis was noted in 19 of the severe cases, and in 10 of the fatal cases.

The importance of these symptoms (gallop rhythm, late vomiting, epigastric pain and tenderness) as danger signals and their value in prognosis are shown by the fact that they were very frequent in severe and fatal cases, and very rare in those that recovered.

As to the treatment, rest in bed is considered of most importance in dealing with heart complications. The figures show that the serious complications nearly always develop within three weeks from the onset of the illness. Mild cases are allowed to be out of bed at the end of two weeks. The presence of murmurs and a slight degree of irregularity are no contraindication if the first sound is strong and the heart is not dilated.

The severe cases must be watched for four or five weeks, but after this time the danger from serious heart complication is usually over. In cases with gallop rhythm, absolute rest in bed, upon a liquid diet, is necessary. At the first appearance of vomiting food should be given by rectum. Strychnine gives the best results. Alcohol and digitalis are not well borne. Morphine may be necessary. The after-treatment of all except the mild cases consists in watching the effect of mild exercise upon the heart for several months, and grading it to meet individual requirements.—*The Boston Medical and Surgical Journal*, 1900, Vol. CII. No. 16.

WILLIAM F. BAKER, A. M., M. D.

SYPHILITIC PHLEBITIS OF THE SUBCUTANEOUS VEINS EARLY DURING THE SECOND STAGE.—Prof. Haslund, of Copenhagen, reports the case of a woman of twenty-five years who was infected with syphilis by her husband. She entered the hospital on the third of February, pregnant in the seventh month. She had excoriated papules on and around her genitals, general adenitis and a papular syphilide as well as gonorrhoea of the urethra.

The twelfth of February her right leg became tender and the next day

along the inner side of the right gastrocnemius a tender, prominent and hard cord could be felt underneath the skin which was freely moveable. There were no spontaneous pains nor oedema; the skin over the vein was of a normal color. The sensitiveness disappeared in a few days but the venous cord could still be palpated; it gradually decreased in size and even now for a few centimeters a thin and hard cord may be felt. This is the tenth case of syphilitic phlebitis which he has observed in this hospital during the last four years, which indicates it to be by no means rare.—*Hospital Stidende* No. 32, 1904.

FRANK H. PRITCHARD, M. D.

BALSAM OF PERU AS A DRESSING FOR CRUSHED AND LACERATED DIRTY WOUNDS.—Dr. F. Burger, who attends many operators in a corset steel factory and gets to treat many lacerated and crushed dirty fingers and hands, speaks very highly of Peruvian balsam as a dressing in these cases. Of course the hands of these patients are dirty, the tips of the fingers may be mashed to a pulp, the flesh intimately mixed with grease and dirt. Such cases under ordinary treatment are the source of a great deal of worry and loss of time. One day he was told that in North America such wounds were simply treated with Balsam of Peru. Following this hint, for the past twelve years he has treated all lacerated, sawed and crushed wounds with this remedy and with the most satisfactory results. He washes off the worst of the blood and dirt with a sublimate solution, pours on Peruvian balsam and dresses the wound with gauze soaked with this drug. This is changed every second or third day according to the needs of the case. The wounds heal readily, however mashed, torn or dirty they may be. Probably cinnamyllic acid forms from the balsam which produces healthy and rapidly growing granulations with an intense tendency to heal. The dressing is easily and quickly changed as the gauze does not adhere to the wound. He has used it not only in this class of cases but also in crural ulcers with weak and flabby granulations, with the best of results. He recalled that during the days before antiseptics there was a woman of his native town who had lived for years in Chile and who had brought back with her to Germany a recipe for a certain salve with which she actually did wonders in curing wounds. After her death this was found to consist chiefly of balsam of Peru which in Chile is said to have been a popular remedy for generations.—*Muenchener Medicinische Wochenschrift* No. 48, 1904. In the same journal for No. 52, of the same year, Dr. R. Petretto, of the Graz Hospital, confirms what Dr. Burger says with regard to the usefulness of this balsam in leg-ulcers. He does not employ it pure but in this combination: Nitrate silver, 0.30; balsam Peru, 6.0; simple salve, 90.0. This is applied on linen or gauze. Under this treatment the ulcers quickly cleanse themselves, the profuse and foul-smelling secretions disappear and good, strong granulations form, which soon lead to healing. Of course it is not a certain remedy in all cases.

FRANK H. PRITCHARD, M. D.

FEBRILE UREMIA.—Dr. Berardinone, of Naples, directs attention to a variety of uremia, the febrile, which is but little studied or known to-day. Subnormal temperature has been thought to be the rule in uremia except in a few conditions as convulsive uremia and that associated with acute dis-

eases. Only a small number of writers have admitted the possibility of fever being due to uremia. The writer calls attention to the frequency of arthritic manifestations both in the antecedents and in the personal history of these patients. The microscopic lesions do not seem to uphold any anatomical theory; therefore, the hyperthermia must be due to "thermogenic" toxins which are either retained or absorbed. Therefore, he advocates the view that arthritism may represent a condition predisposing to the febrile type of uremia, for in the arthritic form the production of toxic substances reaches its maximum not only in quantity but also in quality. In his case not only, but also in fourteen others gathered from the literature this diathesis figured quite prominently. To resume, he would regard febrile uremia as due to retention of various substances formed by the different organs as well as dependent on the internal secretion of the kidneys themselves. These not being eliminated bring about hyperthermia by their influence on the nerve-centres. This supranormal elevation of temperature appears with and runs a parallel course with the other uremic symptoms. At times the hyperthermia may be the only symptom of uremia. It is more frequent in the acute variety where coma prevails. It may be observed in all cases of renal insufficiency, but up to the present it has been noted chiefly in interstitial nephritis. In 87% of the cases published the termination has been death. Perhaps it may be safe to assume that grave arthritism is a predisposing cause of the febrile form of uremia. Its treatment is that of uremia in general.—*La Nuova Rivista Clinico-Terapeutica* No. 1, 1905.

FRANK H. PRITCHARD, M. D.

TREATMENT OF SORE THROATS WITH THE SALICYLATE OF SODA.—Dr. Mayer, since 1895 has employed this drug in the treatment of inflammations of the pharynx and larynx in the form of gargles consisting of six gms. of this drug with one hundred and twenty gms. of water; a teaspoonful of this is mixed with half a glass of hot water and used as a gargle every three hours. If the case be seen late and there be membranes, non-diphtheritic, the throat may be gargled every hour, and the strength of the solution increased to 1-20. This mixture has a sweetish taste which is not disagreeable and is easily used by patients; if a little be swallowed it does not harm anything. In children it is a valuable remedy. As solutions of the salicylate undergo changes it should be prepared fresh every day. He asserts that under these gargles the painful sense of constriction soon disappears while deglutition becomes easier, surprising the patients by their rapid improvement. It produces at the same time anaesthesia of the pharynx, mouth and gums. Mayer also recommends it in aphthous stomatitis; he also employs a paste of the drug to quiet the pain due to periostitis after extraction of teeth as well as to soothe the pain of ulcerating chilblains which it causes to cicatrize rapidly. If the tonsillitis is accompanied by pultaceous or pseudo-diphtheritic membranes they will disappear in two or three days under this treatment. Besides the salicylate disinfects the mouth and pharynx and acts as an energetic "remedy to overcome congestion." Hence, it is a useful preventative of eruptive infections and he has found it serviceable to prevent extension of catarrhal affections of the upper air-passages. Daily use of this gargle will be of use in preventing recurring tonsillitis by disinfecting the tonsillar crypts. Finally, by

this treatment one may hinder pharyngeal inflammatory states from extending to the middle ear and producing suppurative otitis.—*Gaceta Medica Catalana* No. 2, 1905.

FRANK H. PRITCHARD, M. D.

FATAL POISONING BY BORIC ACID.—Dr. Best has found in the literature five cases of serious poisoning by boric acid which ended fatally. For a long time this drug was held to be wholly innocuous. He observed the following case: An individual of thirty-six years who previously had been in good health was seized with a suppurating adenitis of the inguinal glands. These glands were extirpated and the wound after irrigation with a normal salt solution was filled with boric acid, sutured up without drainage and coated over with collodion. On the evening of the third day there appeared on the neck, chest and shoulders an erythematous eruption which tended to become papular. During the days following it extended over the back and thighs. Evident cyanosis, cold sweating, viscid sweating with coldness of the extremities, collapse and obstinate vomiting gave rise to an alarming picture. The temperature which at the patient's admission was 36.9° rose to 38.2°, while the pulse increased from sixty-eight to one hundred and thirty-eight and became weak and irregular; the respiration also augmented from sixteen to thirty-eight per minute. The patient began to be delirious and soon died. The necropsy revealed fatty degeneration of the liver and kidneys with pericardial ecchymoses. In the neighborhood of the cavity which had been filled with the antiseptic the tissues were discolored and infiltrated with serum. Cultures from the blood in the heart cavity and the various organs yielded nothing positive. Excluding septicemia, there only remained poisoning by boric acid, for there were all the symptoms present: vomiting, papular exanthem, weak and irregular pulse.—*La Nuova Rivista Clinico-Terapeutica* No. 1, 1905. (I know of a case where intestinal irrigation with a boric acid solution was followed by alarming prostration; as soon as the irrigations were left off the danger-symptoms disappeared).

FRANK H. PRITCHARD, M. D.

A NEW METHOD OF TREATING HYDROCELE.—Dr. J. Rupfele, referring to an article which he had read in the *British Medical Journal* on the treatment of serous effusions by injection of a solution of adrenalin into the affected cavity where it was used in the treatment of pericarditis, pleuritis, and ascites with success, he extended its use to the treatment of hydrocele. He had opportunity to try it in a young man of twenty-six years whose hydrocele had been punctured for ten years every two or three months. After withdrawing the fluid he injected about two ccms. of a 1-5000 solution. Fourteen days later he employed the same measure in a man of fifty years whose hydrocele had dated back seven years and which had to be tapped every two or three months. In both cases the course and termination were the same. Soon after injection a violent, burning pain began, and during the days immediately following slight inflammatory symptoms set in with an insignificant inflammatory exudate. In a few days later the inflammatory symptoms disappeared and the exudate was absorbed within a few weeks. In neither of these patients did the hydrocele recur. The former case had been treated in vain several times during the course of several years by injections of alcohol, iodine and carbolic acid; hence the adrenalin deserves

the credit of the cure. A little cocaine added to the solution would prevent the violent pain following injection.—*Muenchener Medicinische Wochenschrift* No. 48, 1904.

FRANK H. PRITCHARD, M. D.

KIDNEY DISEASES AFTER INJECTION OF BORAX.—Borax and boric acid are probably employed most of all means for preserving foods. It has long been known that these drugs may cause very serious poisoning, as skin affections, disturbances of the general health, brain symptoms, etc. Dr. Harrington has published series of animal experiments which go to demonstrate that it may also give rise to kidney diseases, namely, subacute and chronic nephritis. He asserts that one may readily consume fourteen gms. of borax or boric acid in different preserves in one's daily food.—*Hospitalstidende* No. 48, 1904.

FRANK H. PRITCHARD, M. D.

DIAGNOSIS AND TREATMENT OF MAMMARY CANCER.—Rodman's conclusions in a paper upon early diagnosis and extirpation of mammary cancer are:

(1) Cancer is not only increasing in frequency, but in doing so is breaking down barriers hitherto recognized. It occurs more frequently than formerly in young subjects and has become common in races at one time immune.

(2) When affecting young subjects the prognosis is distinctly less favorable as the lymphatics are both numerous and patent, whereas in the aged many lymph vessels atrophy.

(3) An early diagnosis should be made and no time lost in waiting for an operation, as metastases to the axillary glands and internal organs occur early, often before they are suspected. In nine per cent. of all cases it is impossible to make a clinical diagnosis.

(4) When in doubt as to malignancy, a complete operation should be arranged for, but before removing the breast an exploratory incision should be made into the growth and a piece from near its centre submitted to a competent pathologist, who, as a rule, will give an accurate report in ten minutes. If malignant, a complete operation should be done immediately. In women past forty the chances in favor of malignancy are as 13 to 1 and should therefore be assumed.

(5) Carcinomata of the sternal hemisphere are less common than similar growths in the axillary half of the gland, but are probably more frequent than they are thought to be. The prognosis is worse in them than in cancers of the axillary hemispheres.

(6) Recurrences being usually in the skin, its removal cannot be too free. Skin grafting, or closure of the wound by plastic flaps will frequently, if not usually, be necessary.

(7) The pectoral muscles, major and minor, should always be removed, regardless of infection, so that all diseased tissues can be removed in one piece, and the axillary dissection both more thoroughly and safely made. Their loss neither increases the mortality, lengthens the convalescence, nor seriously impairs the subsequent usefulness of the arm.

(8) The supra-clavicular glands should be removed if palpably enlarged, or if the topmost axillary glands show macroscopical involvement, otherwise, their removal is unnecessary.

(9) Wounds of the axillary vessels have been infrequent since the muscles have been removed as a routine practice. When occurring in an aseptic operation they have always been recovered from. Moreover, the oedema following is inconstant and transitory, and never a troublesome symptom.

(10) Drainage should always be made.

(11) The three-year limit of Volkmann is insufficient and should be extended to at least five years. Recurrences may occur after ten or more years.

(12) The operative mortality in 2133 operations performed since 1893 by twenty-one American surgeons was less than one per cent. This seems almost incredible when contrasted with the 15 to 25 per cent. mortality for incomplete operations on the breast in pre-antiseptic days.—*American Journal of Surgery and Gynecology*, January, 1905.

NOTE.—Rodman's statement that a competent pathologist can make a diagnosis of malignancy within a few minutes is against our experience. In doubtful cases, those which cannot be diagnosed clinically, frozen sections are often far from satisfactory and may be very misleading. A preliminary exploratory incision with a thorough microscopical diagnosis is much to be preferred in all doubtful cases. We have also found signs of malignancy to be oftener present at the periphery of the growth than at its center, where degeneration frequently takes place.

When the edges of the wound can be approximated, no drainage should be employed. With good haemastasis, primary union can almost always be obtained.

J. D. ELLIOTT, M. D.

INTESTINAL ANASTOMOSES.—In a well illustrated article, Harrington & Gould describe a ring used in making intestinal anastomoses and the process of repair in a number of anastomoses performed upon animals.

The objects of the Harrington ring are:

(1) To furnish a mechanical aid to assist in the rapid and safe anastomosis of the intestines; and,

(2) To make a contrivance collapsible into such small segments that their subsequent passage through the intestine will be devoid of danger or pain.

The ring is made of hard aluminum in four sections. These sections are jointed firmly together by a small bar of steel, which serves as a handle and is removed when the operation is completed.

The outer surfaces of the ring are grooved to hold the ends of the intestines which are tied in place by catgut purse string sutures. The segments fit together by means of sliding tongue-and-groove joints so rounded that they will not cut or catch in the tissues. The ring is made in three sizes from five-eighths of an inch to one and one-eighth inches in diameter. The medium size is best for work in the small intestines and large size for work in large intestine or gastroenterostomies. The same technique, with but a slight difference in details, is used for end to end and lateral anastomoses. In an end to end anastomosis, clamps are applied in the usual manner a few inches from the seat of operation and a gather stitch, which goes deeply enough through the muscular coat to insure its not slipping, is

placed on either side of the area to be resected. The bowel is now cut away up to one-eighth of an inch from the gather stitch, because a wide margin forms a thick scar. To obtain a secure joint at the mesenteric border a mattress suture, which includes a portion of the mesentery on each side, is put in but is not tied at once. The ring is now introduced and one gather stitch tied. The mattress stitch is next tied, followed by the tying of the second gather stitch. The cut ends of the bowel now lie smoothly against each other and by the use of the handle can be easily moved about to facilitate sewing. The main stay of the suture is a Cushing's continuous stitch which penetrates the muscularis mucosae. This starts at one side of the handle and passes around the intestine with frequent knots until it reaches the handle from the other side. The handle is now unscrewed and removed, leaving the ring held together by the purse string sutures and the suture is continued over the hole just left by the handle. The cut edges of the mesentery are drawn together by a few interrupted stitches.

In lateral intestinal and gastro-intestinal anastomoses the gather stitches are made in the form of an ellipse, with just room enough for the incision between the sides. The mattress suture is omitted here and a continuous stitch is employed to approximate the serous coats and form the anastomoses.

It is desirable to leave the ring in place; but if it causes a decided stretching of the intestines, it can be broken down by gently squeezing it through the intestine. After twenty-four hours the ring is firmly held in place by the swelling of the intestine; this swelling subsides in from four to six days and the ring collapses.

The passage of the ring through the intestine requires from one to three weeks.

The process of repair, as studied in animals, is very interesting and briefly is as follows:

For the first few hours after operation the mucous membrane is the seat of marked hyperaemia with more or less bloody extravasation. This is followed by an exudation which extends into the glandular tissue until at the end of three days the glands disappear about the cut edge for two to five millimetres. At the end of five days the slough generally separates, leaving a clean line. If the intumescence has been a moderate one the mucous membrane will cover in the ulcer in about eight days. The glands themselves, though atypical in shape, possess all the characteristics of mucous glands. At first the new mucous membrane has no muscularis mucosae but at the end of six weeks a substitute muscularis mucosae has been acquired, which consists largely of granulation tissue in which are found a few fibres closely resembling smooth muscle. Fourteen days are required for the repair of the serous surfaces which consists of a thick scar reaching for a varying distance along the adjacent bowel and dipping down into the depth of the suture. The muscular coat heals with so small a scar that it is often unrecognizable to the naked eye.

From comparison with a limited number of clinically successful anastomoses in human beings, the changes seem to be very similar to those which take place in animals.

NOTE.—Experience shows that the purse string sutures must be tied very tightly or the ring will collapse. These rings can be bought at all instrument

shops and are certainly worthy of a trial.—*Annals of Surgery*, November, 1904. J. D. ELLIOTT, M. D.

CALCIUM CHLORIDE AS A RECTAL HAEMOSTATIC.—Boas recommends calcium chloride as a rectal haemostatic in bleeding haemorrhoids and rectal haemorrhages due to carcinoma, etc. In cases of bleeding haemorrhoids a half an ounce of a 10 per cent. solution should be injected into the rectum after the morning evacuation and retained for some time. An evening injection should also be used if the haemorrhage is severe.

A chemically pure salt will cause no discomfort, but if not pure some burning and tenesmus may follow the injection.—*Berliner Klinische Wochenschrift*, January 23, 1905. J. D. ELLIOTT, M. D.

SURGERY OF THE GALL-BLADDER AND BILE-DUCTS.—In a brief review of one thousand operations upon the gall-bladder and bile-passages, Wm. J. Mayo and Charles H. Mayo give some very instructive statistics upon the mortality of these operations, and state the indications calling for cholecystostomy and cholecystectomy. In making up the mortality rate they have included among the deaths every patient who died in the hospital after having been operated upon, although some deaths occurred as late as three months after the operation and were due to intercurrent diseases or accidental causes, such as apoplexy, pneumonia, heart disease, chronic nephritis, etc. And no operation was refused if a patient desired it after having the dangers and chances of relief explained to them.

There were 960 cases of benign disease with a death rate of 4.27 per cent., and 9 deaths in 40 operations in cases of malignant disease, or a mortality slightly in excess of 22 per cent. The operations for malignant disease were discouraging as the mortality was high, and of those who recovered comparatively few received sufficient palliation to repay the immediate risk and suffering involved. Two cases of early carcinoma of the gall-bladder, which have not recurred after a period of more than two years, show that early operation in malignant disease here as elsewhere is the only method of treatment offering any hope of success, but the operation must be performed early.

Five hundred and seventy-three cholecystostomies, with a mortality of 2.46 per cent. and 186 cholecystectomies, with a mortality of 4.3 per cent., were performed. This does not include 101 cholecystostomies and 44 cholecystectomies performed as part of a common-duct operation. Of the common-duct operations 137 were on benign cases and the death rate was 11.7 per cent. When the disease was limited to the gall-bladder, including all non-perforating infections, the mortality was 2.44 per cent.

Next to malignancy and acute perforating infections of the gall-bladder and pancreas, the most serious complication of gallstone disease is involvement of the common-duct. This is clearly shown in the above statistics; 2.44 per cent. mortality for cases confined to the gall-bladder, and 11.7 per cent. mortality for cases with common-duct involvement. And these statistics illustrate the dangers of delay in treating gallstones and the tendency to the production of complications which operation will be unable to relieve.

The high mortality in common-duct operations is due to the condition

of the patients. The operation itself is not particularly difficult or prolonged but two serious elements are usually present, jaundice and infection, and the mortality, both immediate and remote, of choledochotomy depends almost entirely upon these factors. About one-third of the patients with common-duct stones had little or no jaundice at the time of the operation and very little infection. In these cases the mortality was less than 2 per cent. However, the histories of these patients showed that both jaundice and infection were present at the time the stones passed into the common-duct, and an operation during this acute stage would have been fraught with greater danger. Unfortunately the majority of common-duct patients had never had such an intermission or had passed beyond it and operation was necessary for the saving of life.

Another class of cases, all of whom died, and about whom it was not always possible to foretell the conditions previous to operation, were those patients with obstructive jaundice in whom no trace of bile was found in the bile-passages, the common and hepatic ducts being filled with clear fluid. The liver had entirely ceased to act. The patients, while extremely feeble, were able to be up in some cases. The jaundice was extreme but was not accompanied by leaky blood vessels or subcutaneous haemorrhages. Death occurred within four days in all cases. In a number of instances the same condition was met with at an earlier stage, the bile-ducts being filled with thick, flocculent bile of a dark greenish color, very much like that which occurs in the gall-bladder during the acute stage of cystic duct obstruction and before the pigments have become absorbed. In about half of these cases the liver began to functionate again and the patients recovered.

The mortality of cholecystectomy was nearly twice that of cholecystostomy. Although the former operation was to a certain extent used in more severe cases, the difference in the death rate cannot be explained in this manner, as the more dangerous acute infections were nearly always drained by a cholecystostomy. In not a single case did stones re-form in the gall-bladder when it was left, therefore cholecystostomy is the safer operation, and cholecystectomy should only be used in those cases in which a cholecystostomy may be expected to furnish, in a considerable number of cases, a partial or complete failure.

All cystic gall-bladders should be removed. This is especially true when a stone is impacted in the cystic duct, as a stricture frequently follows its removal and gives rise to colics or an external mucous fistula by interfering with the escape of mucus. As a rule gall-bladders containing bile can be drained. If the cystic duct should be considerably injured during the removal of a calculus, introducing doubt as to its future permeability, a cholecystectomy should be performed. Gall-bladders which are suspiciously thick and hard should be excised, for in this way early malignancy may occasionally be cured, as shown in two cases referred to above.

In most cases of chronic cholecystitis without stones the gall-bladder should be removed, for an infection which is able to continue without the aid of foreign bodies calls for radical treatment. But before making such a diagnosis, the duodenum, stomach, pancreas, appendix and right kidney should be examined, and if the theory is correct the gall-bladder should be thickened, of light color, the lymphatic glands along the cystic and common-

ducts markedly enlarged, and it should contain tarry bile and the mucous membrane be covered by fine, fibrinous specks.

In patients who have gallstones and who have suffered from attacks of jaundice and symptoms of infection of the common and liver ducts, but without stones in the ducts, cholecystostomy is the operation of choice as it furnishes bile drainage. If cholecystectomy is performed, the cystic duct must be left patent as drainage is vital.—*The American Journal of the Medical Sciences*, March, 1905.

J. D. ELLIOTT, M. D.

CATARACT ASPIRATION, A RADICAL OPERATION OF THE ARABIANS.—The author says the Greeks never practiced this method. It originated in Persia and Mesopotamia. There are two methods, an older section of the cornea and introduction of a glass tube; and a more recent section in the selera, and introduction of a thin, grooved metallic cataract needle. He describes the method of discovery and employment of the latter, and regards it as the second step in the progress towards the method employed to-day. It is not known who discovered the first method, but the second was discovered by Amman about 1020 A. D. He thinks there are cases where it could be used advantageously even to-day.—J. Hirschberg. *Annals of Ophthal.*

WILLIAM SPENCER, M. D.

CAN GLAUCOMA BE CURED WITH ADRENALIN WITHOUT OPERATION?—From a number of cases which he has treated, the author is convinced that the majority of cases of glaucoma, and even secondary glaucoma, is curable by the use of adrenalin, and without operation. In order to reach such a result, four rules must be observed.

1. The glaucoma must be in the early stages, and no organic changes must have taken place in the ciliary body, the iris, or above all in the angle of the anterior chamber.

2. Adrenalin must be dropped in the eye every half hour without interruption, until the eyeball has become soft. This requires about three days.

3. With the adrenalin must be combined eserine. Adrenalin limits the hypersecretion of the aqueous humor. Eserine aids the exit of the aqueous through the filtration angle, by opening the spaces of Fontana.

4. As soon as the intraocular tension is reduced, the adrenalin must be withdrawn, or at least used very sparingly, otherwise there is danger of producing a permanent hypotony.

Adrenalin is a powerful constrictor of the peripheral vessels; the blood is driven into the more central vessels, and in them the pressure is distinctly raised. The vaso-constrictor effect of adrenalin is of short duration, scarcely lasting half an hour, as the drug rapidly oxidizes within the organism, and is destroyed.

A long continued use of adrenalin is not without danger, as it rapidly causes changes in the vessel wall, atheromatous in character. This is especially true with the larger vessels, notably the aorta. It is for this reason that some pathologists have thought that atheroma can be caused by hypertrophy and hypersecretions of the supra-renal bodies. Also locally applied in the eye, adrenalin is not an indifferent remedy. It can, if over-used, produce permanent hypotony, which Grandelement has observed in one case.

In ophthalmology, adrenalin as a reducer of tension has not as yet been systematically used. Its use as an hemostatic is well known. Another use for it is to increase the anaesthetic effect of cocain and acoïn. This is done by causing anemia of the superficial tissues of the eye. Finally adrenalin accelerates the absorption of mydriatics and myotics. It is contra-indicated in all diseases requiring for healing hyperemia and lymphocytosis, as for example ulcerative processes of the cornea. In these conditions dionin is indicated, and is as strong a vaso-dilator as adrenalin is a vaso-constrictor.—*Grandelement. Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

CEREBROSPINAL MENINGITIS.—Francis Huber gives a retrospective consideration of 100 cases of cerebrospinal meningitis observed by him during the epidemic of 1904 in New York City. The great majority of these cases occurred in children.

Prodromata occurred in three cases only. In all others the invasion was sudden, with such symptoms as convulsions, chills, chilliness, headache and vomiting; even coma. The mode of onset did in no way predict the final outcome of the case. Some with mild onset either proved fatal in a short time or had persistent rigidity for weeks, while others with violent onset got well.

Fairly constant symptoms were headache, of which the patient even complained while apparently unconscious; opisthotonus, and in severe cases orthotonus; tenderness of posterior cervical muscles. Retraction of the head and flexion of the legs persisted from three to four months in some of the cases.

Convulsions, general and local, were frequent in the early stages. Strabismus, ptosis, difficulty in deglutition, loss of control of the sphincters were common symptoms; hemiplegia and monoplegia were also observed. Conjunctivitis and otitis were also common, probably as an extension of the process from the nasal mucous membranes. It is important to bear in mind that the diplococcus *introcathilaris* has been demonstrated in the secretions from these membranes.

The cranial nerves are prominently affected. In the eyes we find in most cases such symptoms as photophobia and contracted pupil (early). With the increase in intracranial pressure there is dilatation and absence of the pupillary reflex. Other symptoms to be encountered are irregular pupils, hippus, nystagmus.

Hearing is at first hyperacute; later deafness may supervene.

Restlessness and delirium, later coma, were common manifestations. The mind was usually much clouded. After the acute stage of headache and hyperesthesia had passed, many of the children, although coiled up with muscular rigidity, said they felt well.

Splenic enlargement was not frequently demonstrated. The respiratory centres were usually affected. The pulse, contrary to the disease in adults, was mostly rapid.

Skin eruptions were present in the majority of the cases (percentage not given). Petachiae occurred in about one-third of the cases. Herpes was common. The mortality rate is not mentioned. (Koplik puts it at about 60 per cent.)—*Archives of Pediatrics*, February, 1905.

C. SIGMUND RAUE, M. D.

A 500-GALLON OVARIAN CYST.—*Shands* (Washington) reported the case of an 80-year unmarried woman who had an ovarian cyst for which she refused to submit to operation. At the first tapping fifteen quarts of an amber-colored fluid were withdrawn; this process had to be repeated in about three months, when a like amount was drawn off. During the first year it was tapped six times, the quantity of fluid was about fifteen quarts each time. After this the period of time between the tapplings decreased very rapidly until during the last eighteen months of her life it had to be done regularly every ten days. The amount of fluid drawn at each tapping varied very little, being always about 15 quarts. The patient enjoyed exceptionally good health for one of her age, and died from emaciation and old age. This patient was a rather large woman and quite robust when first seen, but lost flesh gradually, until at the time of her death, she was as near a living skeleton as one could imagine. The total number of tapplings in this case was 130, which yielded 1950 quarts, or about 500 gallons.—*Amer. Jr. Obs.* Vol. 50, 852. THEODORE J. GRAMM, M. D.

MODIFIED CHAMPETIER DE RIBES BALLOON.—*Voorhees* (New York) has reported another series of cases treated with his modification of this balloon, and after discussing the indications and results of treatment in the several obstetric conditions wherein cervical dilatation is called for, he comes to the following conclusions:

1. The modified Champetier de Ribes balloon is the best artificial hydrostatic dilator of the cervix.
2. The balloons are especially effective in dry labors to start the pains.
3. Labor, if prolonged and protracted from whatever cause, is hastened and in a large percentage of the cases terminates spontaneously after their use.
4. The balloon is the best and most certain method of inducing labor for all indications.
5. In eclampsia and in placenta praevia the balloon has a field of usefulness which diminishes markedly maternal and fetal mortality.—*Amer. Jr. Obs.* Vol. 51, 25. THEODORE J. GRAMM, M. D.

GYNCOLOGICAL OPERATIONS UPON INSANE WOMEN.—*Le Roy Brown* (New York) has operated upon 248 insane women, and reports some general conclusions. He accepts the suggestion of Gooch that no medicinal agents can relieve a disordered mind except indirectly through the disorder of the body with which it is connected, and this disorder of the body must therefore be ascertained and discriminated whenever possible. In the treatment of his cases, every possible hygienic measure was also applied to improve the general health. It has been his uniform experience that a surgical operation on an insane patient would not be a factor in causing the mental disturbance to be more pronounced. Marked benefit was obtained in septic psychoses. He advocates early surgical intervention in recognizable pathological conditions and has found that approximately 65 per cent. of patients improved in their mental states when operated during the first six months of their alienation, whereas only 27 per cent. improved after one year.—*Amer. Jr. Obs.* Vol. 51-208.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

with the collaboration in Foreign literature of P. W. Shedd, M. D.

ARTHRITIS DEFORMANS AND ITS TREATMENT.—Dr. Benjamin F. Bailey, in *Progress*, thus describes the plan of treatment which has given him his best results in this troublesome disease. Treatment of arthritis deformans should be directed, with three objects in view: First, improvement in nutrition; second, to allay pain and inflammation; third, the overcoming of the deformity and the restoration of muscular strength. To neglect any one of these lines, will destroy your whole treatment. The improvement of nutrition requires digestible and assimilable food, and also medicinal means which shall aid in the digestion and assimilation. We should push the diet in arthritis deformans. Eggs, meat preparations, the best cereal food, cream, olive oil, Russell's Emulsion are all indicated. Medicinally, the *arsenite of iron* and *iodide of arsenic*, persistently used, offer the most promise of success. Exacerbations of pain exhaust the patient from loss of sleep and so on. In such cases, the author does not hesitate to order at times, a powder consisting of *salophen*, five grains; *codein*, half a grain. Bathing the joints with a mixture of equal parts of *oil of winter-green* and *olive oil* greatly relieves pain. The joints should be wrapped in cotton. A mild positive galvanic current over the affected joints helps to allay inflammation. Passive exercises break up adhesions and massage builds up wasted muscles.

ACUTE EPILEPTIC SEIZURES OCCURRING AFTER ABDOMINAL SECTION—RECOVERY UNDER HYDROCYANIC ACID.—In *Monthly Homœopathic Review*, for April, can be found the interesting record of a case of unusual character. A married woman, neurasthenic, who had not improved under any previous treatment, was operated for inflammatory state of right appendages. A suppurating tube and the appendix were ablated. The fundus uteri was sutured in its normal position. Nothing noteworthy occurred during the first three days. On the evening of the third day, the patient complained of painful micturition, and immediately had a prolonged convulsive seizure. Other attacks followed next day. The seizures were epileptiform in type. Right side was first attacked, then both sides simultaneously, ending finally upon the left side. Head was drawn to the right at first part of seizure; and to the left side at latter part of attack. Urine passed unconsciously; frothing at lips; a cry came at end of the attack. After other therapeutic measures had been tried, it was decided, upon consultation, to give *Hydro-*

cyanic acid 2x. dilution, three drop doses every third hour. There were no recurrences after this remedy had been given. The various forms of perturbation of the nervous centres that the immediate impact of abdominal section may engender have frequently been the study of physicians. Neurasthenia, mental disturbances of low or high grade, are of not infrequent occurrence. This observation of Drs. Burford, Madden and Goldsbrough adds another sequel, happily more rare, acute epileptic seizures. By an interesting coincidence, the late Henry Madden, M. D., first recommended the use of hydrocyanic acid in recent epilepsy. Reference to this may be found in Hughes' writings. The result of its administration in this remarkable case, would seem to strengthen the claims that have been previously made.

THE INDICATIONS FOR ADONIS VERNALIS IN CARDIAC AFFECTIONS.—According to Dr. Gisevius, the leading indication for Adonis is an affection of the heart due to an attack of rheumatism. Dr. Kernler says more specifically that this remedy is useful when the muscles of the heart are in an advanced stage of fatty degeneration. The remedy seems to spur on again the paralyzed muscle cells. Some interesting cases have been recorded by the latter physician which show that after a severe infectious malady, when the action of the heart had become weak, intermittent, with anguish and oppression, the administration of the first centesimal dilution of Adonis soon brought about a normal action of the heart. These symptoms very strongly suggestive of a myocarditis. Indeed, the author says that in myocarditis with "callous" degeneration of the heart Adonis is indicated by the irregularity of the heart's action; and also by symptoms of constriction and vertigo. In the other cases narrated, while the diagnosis is somewhat obscure, we may find much that is suggestive in the statements that the patient sat up in bed suffering from dyspnoea and sense of constriction; the face was swollen and cyanotic; the pulse was weak and irregular and so rapid that it might not be counted. This patient was a woman who had been a sufferer from "heart disease" for twenty years and who had lately had influenza. It really looked as if the Adonis had been useful in a serious dilatation. The last case is still more remarkable. A man aged sixty years, an excessive user of whiskey, had dyspnoea with cyanosis. Pulse quick, irregular. Heart action intermittent. There was oedema and general dropsy of the lower limbs. The genital organs were also oedematous, and micturition difficult. We can better understand this clinical picture. Adonis 1., removed the dropsy and relieved the symptoms so that he left the hospital "cured" in a couple of weeks. One may conclude that Dr. Kernler regards Adonis as a very useful remedy when the pulse is rapid and irregular, when there is associated vertigo, palpitation, anxiety and dyspnoea without fever. He seems to dwell upon a previous attack of either rheumatism or influenza and further indications for it. He thinks it generally better than either our *Strophanthus* or *Crataegus*.—*Hom. Recorder from Allg. Hom. Zeit.*

REMEDIES FOR FURUNCLES.—Although we possess several good prescriptions for furuncles of an exceedingly painful kind situated within the auditory canal or within the nose, Dr. T. L. Shearer adds another one—the *Echinacea*. He has preferred the latter to others of late, giving it in

material doses in watery solution frequently repeated. Furuncles in the nose and ear are apt to be very painful, even although small in size, on account of the tension produced when inflammation occurs within such a circumscribed space or cavity. We have usually given the *Calcarea picrata* or *Hepar* when the boil was situated within the ear or *Belladonna* or *Hepar* when it occurred within the nose, but now *Echinacea* may be added to the list.

APOCYANUM CANNABINUM IN DROPSY AND OBESITY.—Dr. Jerome Keys, in *Medical Outlook*, refers to the tendency towards production of troublesome nausea and vomiting when apocyanum is administered for some time. He has been in the habit of administering *Ipecacuanha* 1, in alternation with apocyanum to obviate this tendency and to permit prolonged administration of the apocyanum. He has obtained good results in many cases of albuminuria with dropsy. The writer also speaks well of the efficacy of apocyanum in corpulent subjects, especially when such patients are also troubled either with rheumatism, dropsy or with albuminuria. Some have decreased around the waist six inches per month, the only noticeable effects being increased flow of urine, increased activity of bowels, and a greater tendency to take active exercise.—*Recorder*.

OLD TIME REMEDIES.—*La Presse Médicale*, of Paris (28th Jany., 1905,) publishes a favorable criticism of Mr. Marcel Labbe on Mr. Cabanès' new book on "Old Remedies."

As a practitioner of the modern school of medicine we found it interesting, and a gleaming from it we now translate for the readers of the *HAHNEMANNIAN*.

"In giving the history of old remedies, some of these, even up to the present time, the best, such as *theriaca*, *orvietan*, *antimonium*, various stones, sugar, coffee, *thea*, tobacco, quinine, *ipeca*, etc.; Mr. Cabanès teaches us not to continue *à priori* the popular prejudices and the old-time practice."

Because empiricism gave us the use of the best of our modern remedial agents, *i. e.*, quinine, and we find in the Middle Age the origin of modern therapeutics, *opotherapy* and *serumtherapy*.

Prof. Landouzy has demonstrated in his book on serumtherapy that snake charmers were the first who gave us the first practical knowledge of immunization.

The animal kingdom helped to a certain extent our therapeutics. The dog was one of the most serviceable animals. Ambroise Pare praised the use of the oil of puppies. (In Turkey new born mice are put in olive oil and kept in a bottle exposed to the sun. It is considered, when dropped in the ear a great and positive remedy for otalgia). Goose grease could cure every ailment. Dogs' brain was an antidote against mania, frenzy or madness. Eye had a curative effect against ophthalmia, teeth calcinated, against toothache. Galen used to prescribe to those suffering from ailments of spleen the spleen of new born puppies, and every other viscerae to the corresponding affected organ. This practice was surely what we now call *opotherapy* without knowing the value of it.

But the most ancient and the most beautiful exhibition of opotherapy is surely PLACENTOPHAGIA, then much in practice.

We find in the writings of Hippocrates that a mixture of worm's head, alum of Egypte and placental membranes, the whole triturated with goose fat was introduced in the vagina of sterile women.

Jacques Duval, in difficult confinement cases, advised physicians practicing in the country to apply cow's placenta over the pregnant abdomen, or to give to the suffering mother a few pieces of the same to eat.

Jean Rulean used to prescribe dried and pulverized placenta to calm the violent gripping pains.

Madame Toussaint states that the habit of eating placenta is very old, and that we find people in America, Asia, Africa and Oceania to adhere to this tradition. This habit prevails, for instance, in Maroc (Algeria).

It seems nothing could equal the galactopoietic properties of the injection of placenta for mothers and wet-nurses, even virgins' breasts would have exhibited milk had they injected some placental tissue.

These theories have just recently been upheld by Mr. Iscovesco and Bonchacourt.

Spider used to possess properties similar to those of cantharides.

Lorry reports the case of a woman who, to poison her husband, made him take eight large black spiders and only soporous symptoms developed.

Vipera occupied, from early dates, a prominent place in *materia medica*. It formed a part in the compilation of the famous *theriaca* (a compound of more than 70 ingredients), this universal panacea invented by Roman physicians. According to Galen, the infusion of Vipera in wine had the peculiar property of curing *avarice*.

The contemporaries of Charas used to attribute great invigorating restorative virtues to Vipera; because this snake changes its skin annually twice. This theory tacitly demonstrates the use of medicine by analogy and *therapeutics by similitum*. In XVIIth Century, broth made from Vipera was much esteemed. Mme. de Sévigné helped a great deal in introducing it in the then fashionable world and time came when Vipers were much in demand and hence they became scarce.

The fame of Vipera lasted however, and continued to be mentioned in the Codex of 1866, and only in the edition of 1884 was it suppressed.

Again we find it to-day in the therapeutics under a modernized name: *the Antivenomous Serum*.

In Mr. Cabanès' book, sugar, chocolate, coffee, thea are also studied as remedial agents, although they form part of our daily food.

These examples, gleaned from Mr. Cabanès' book, suffice to demonstrate that there is nothing new under the sun and that our present practice was already known to our ancestors, although in a state of a germ and that we only developed and co-ordinated with the scientific spirit of our epoch, these empirical practices. Thus the methods of the old fashioned bone-setters became the rational massage treatment, the "swing" where our ancestors used to rock themselves gave to Charcot the idea of the vibratory treatment, the mysterious passes created the modern hypnotism, the simple drugs have been replaced by the alkaloidal therapeutics, the empirical habit of eating human and animal viscerae was transformed, under the imaginative impulse of Brown-Sequard, into opotherapy, already so fertile in results.

From all these Mr. Cabanès concludes that we must not condemn and reject without study and keen observation the popular prejudices, as they often contain some truth.

New York, 19th March, 1905.

DR. JOHN ARSCHAGOUNI.

SABAL SERRULATA.—To obtain the marvelous therapeutic effects of this drug it is necessary to use a tincture of the fresh fruit. Preparations from the dried fruit, and still more from the root, have no therapeutic value.

It produces headache with vertigo; burning in the mouth, progressing to the throat, palate and nose; sneezing and lachrymation. The larynx and trachea are also involved, inflamed, with transient alterations in the voice. The kidneys (and ovaries) are irritated, with bloody urine. Bladder pain, tenesmus, sensation of stricture on urinating. Urethral catarrh. Retraction of the testes, with sensation of genital debility, even with frequent erections. Testicular pain. It acts also on the prostate, due probably to its chief sphere of influence, the lumbar cord. The temporal and supra-orbital nerves also suffer.

Congestion of the ovaries, particularly the left; the mammæ are very sensitive. Vulvar pruritis. Retarded menses with sensation of general fullness.

The above pathogenesis establishes the diseased states in which it is useful. It is considered specific in prostatic hypertrophy, and acts upon the bladder and urethral tissues, aiding micturition. It also acts upon the breasts, enlarging and fattening, with a tonic effect, thus increasing the flow of a nutritious milk.

It may be commended in female disorders with weakness, scanty menstruation, leucorrhea, mammæ flaccid and fallen, disorders or lack of sexual desire. There is no doubt that it reanimates the sexual sphere even if material lesions exist.—*Dr. Pinart. Revista Homeopatica de Barcelona.*

DIARRHEA IN TEETHING INFANTS.—*Ipecac* 1, (in watery solution every half hour) especially with overloaded stomach, discomfort, with slimy vomiting, no thirst, with pallor and weakness. If not better in twenty-four hours then,

Veratrum album 3, especially with belly-ache, anxiousness, restlessness, vomiting, depression, cold limbs, cold sweat. If the loss of strength be great, then, *Phosphorus* 30; with extreme prostration *Moschus* 6, dose every ten minutes.

Dulcamara.—Diarrhea after exposure to cold; the colic is relieved by stool.

Antimonium crudum. 6.—Watery diarrhea, often slimy and greenish, more abundant after a nursing; tongue thickly coated, eructations and nausea.

Argentum nitricum 6.—Diarrhea during weaning or from cold. Stool watery, stinking, yellowish or greenish.

Phosphoric acid 6.—Watery, painless diarrhea; often involuntary stool; semi-chronic.

Secale 3.—Watery yellow or green stools in rapid succession; straining evacuations. Prostration soon follows; the eyes sink in, the face becomes pale, the limbs cold.

Aethusa 3.—Abundant watery or slimy greenish or bright yellow odor-

less stools, with pain, restlessness, legs flexed on abdomen, vomiting of curds.

Arsenicum album 12.—Dark, large, malodorous stools, especially at night or in the morning; after putting the child to the breast. Great thirst for cold drinks, anorexia, discomfort, vomiting, restlessness, weakness and emaciation, extremities cold. Often edema of the ankles; scanty urine.—*Dr. Sieffert. Leipziger Populare Zeitschrift.*

RENAL NEURASTHENIA.—Though frequent enough, true neurasthenia is not so common as is often supposed, and many states characterized by a neurasthenic fatigue are confused with true neurasthenia or Beard's disease.

There is an interesting type of these pseudo-neurasthenias due to a toxemia of renal origin; most common in men about the age of fifty, of sedentary habits, who have lived strenuously, devoted themselves immoderately to the pleasures of the table, of alcohol, of tobacco.

On examination, symptoms of the classical neurasthenia are found,—the patient is prostrated, muscularly weak, averse to all exertion; he has cramps, tremors, vague pains, headache, total disinclination to mental effort. To these phenomena are added vascular disturbances, chills, flushings, burning sensations in various parts, digestive disorders, acid dyspepsias, gases, irregular and fetid evacuations. The urine is variable in quantity, sometimes scanty, high-colored, high specific gravity; again, abundant, clear, low specific gravity, but always contains much indican and indoxyl.

These patients are pale, anxious, irritable, complaining, melancholic, and fear they cannot get well. Careful examination shows arterio-sclerotic lesions. The arteries are hard, the second aortic sound sharp, and there is not only muscular but dyspneic asthenia. The pseudo-neurasthenic have arterial hypertension, and the urinalysis frequently shows traces of albumin. Their neurasthenia is an intoxication from renal poisons.—*Huchard.*

Treatment conforms to the etiology, and improvement follows the removal of the auto-intoxication; first by regimen, secondly by proper internal treatment.

The milk-vegetable diet should be rigorously enforced. Milk, eggs almost raw, fish, oysters, vegetables are the fundamentals; potatoes, turnips, tomatoes, beets are forbidden. Rice, macaroni, well-cooked maize are good, if cheese (usually poorly digested by these patients) be not added. Further, diet may be varied according to the individual digestive capacity, on the express condition that fat soups, preserves, and all meats be prohibited. Of beverages, tea and all forms of alcohol are forbidden. After each meal coffee seems to act favorably. It is essential to aid digestion by all possible means; stimulating the hepatic function and neutralizing the intestinal toxins, important factors in auto-intoxication, and this may be accomplished by *Nux Vomica*, *China*, *Phosphoric Acid*, *Carbo Vegetabilis*, *Lycopodium*, *Benzoic Acid*, according to symptomatology.—*Dr. Pinart. Revista Homeopatica de Barcelona.*

THE HAHNEMANNIAN MONTHLY.

JUNE, 1905.

THE RELATIONS OF HOMOEOPATHY TO MEDICAL PROGRESS.

BY W. S. SEARLE, A. M., M. D., BROOKLYN, N. Y.

Read before the Homœopathic Society of Kings County and the Clinical Club of New York City.

In the tenth year of the eighteenth century, when he was fifty-five years old, Samuel Hahnemann published his organon, and initiated a reform in medical philosophy and art which shook to its very foundations the Aesculapian temple. It was a veritable cataclysm which has no parallel in the history of medicine.

We are gathered here, on this the one hundred and fiftieth anniversary of his birth to review what has passed into history in the century just closed in which the influence of this mighty reformer has been most felt.

It is my purpose in the brief time allotted me to take as dispassionate an accounting as is possible to one who for the half century of his professional life has been a somewhat active partisan of the newer school of medicine. . . . Time is the greatest and most reliable test of truth. Fads, theories, experiments come and go, and will come and go till the millenium. For man is ever asking why and when and how and where—forever fumbles around in his blind search after truth—forever mistakes sequences for consequences, coincidences for causes, recoveries for cures. But the centuries winnow his theories and blow away the chaff from the kernel inevitably and forever. The crop remaining may be smaller or larger, more or less valuable, but, of this we may be sure, it is truth and cannot be ignored nor controverted nor disproved by

the mind of man for God is truth and truth is God and must be immortal.

It seems to me appropriate this evening to re-turn the pages of history, to note the progress of the dominant schools of medicine as well as consider briefly a few other points suggested by this interesting occasion.

And, first, let us pay our respects to the older branch of the profession.

An old proverb says, "Give a dog a bad name and send him to the devil." And the time was—not so remote either—when the homœopath was so loudly and persistently called a quack that the ignorant and indifferent were led to think the epithet appropriate. That day has passed, and our distinctive title as physicians is no longer associated with opprobrious substantives or emphatic adjectives. But I am sure there are few, even among the intelligent laity, who appreciate that the homœopathic school of medicine has long occupied the foremost place in medical reform and medical progress. It is the truth, however. And a portion of this historic verity—some of the facts which confirm and establish this assertion—I will briefly rehearse. In the first place, let me say that no one—not even a physician unread in this direction—can comprehend the full value and extent of what I may term the negative influence of homœopathy without a careful study of the course of old-school therapeutics during the last century—the period, so to speak, of the adolescence of homœopathy.

Sit down in any well-appointed medical library, and selecting, we will say, pneumonia, as a type of inflammatory disease, scarlet fever, as a type of zymoses, and acute rheumatism, as a type of general disease, trace their therapeutic history down along the years, and I venture to say you will rise from such a study with unexpected and unpleasant emotions. As illustrative of this point, allow me to quote very briefly from the writings of those who, in their day, were esteemed of the highest authority.

At the opening of the Nineteenth century, Cullen occupied easily the first place among the physicians of England, and I take his work as representative of the condition of medical art at that time. In the treatment of pneumonia he directs large and repeated bleedings—"blood in a full stream from a large orifice." This is to be followed by emetics, cathartics and blisters. For scarlet fever he advises about the same routine. In

acute rheumatism he again prescribes large and repeated bleedings, purgings and blisters. This is a fair sample of the treatment then in vogue, not only for the maladies named, but for all acute diseases.

We now step forward a quarter of a century and take up the seventh edition of the "Practice of Robert Thomas." For pneumonia he bleeds to faintness. This he repeats two or three times. But, if the patient is too much exhausted by the first butchery, he substitutes leeches and cups. He applies blisters, but purgation he would make mild. Antimony in nauseating doses is given, and opium to still pain. Those of you only who have seen a healthy man nauseated by antimony can appreciate what days of exhaustion it produces. In scarlet fever he first orders an emetic. Then purgatives, leeches and antimony follow; but he discards blisters as a rule. For rheumatism he bleeds largely and purges freely. He applies blisters or leeches and gives opium, of course.

Thirty years later we open the works of Dr. Geo. B. Wood, of Philadelphia, a standard authority of that day. In pneumonia Dr. Wood advises bleeding only in vigorous people, followed by active catharsis. Then he gives antimony in nauseating doses. Later he cups and leeches, and if the patient gets too low, he would stimulate. For scarlet fever he first vomits and then purges. If the child is vigorous, he bleeds him, but, as a rule, leeches instead. He naively adds that most cases will recover without any treatment. In acute rheumatism, however, he is less sanguine, and more sanguinary. He bleeds the patient as much as he can endure, purges and sweats him. If not better he gives calomel and colchicum, opium, of course, on the Donnybrook Fair principle—"Wherever you see a head hit it." And so we advance to our own time, to open Reynold's system of medicine. Wilson Fox, of London, is the specialist who treats of pneumonia. He says that pneumonia is a disease which tends to terminate by crisis on certain days. Of antimony he remarks that it often produces poisonous effects; that the majority are better off without calomel or opium, "which," he adds, "have fallen into disuse not without reason."

What reason? I wonder.

He asserts that treatment by alkalies and remedies lately introduced only serves to show how little pneumonia is influenced by medicine, and that the less active (poisonous)

these are, the better. Blisters are "useless and distressing." Well! I should think so! Did you ever wear one?

The author of the article on scarlet fever is Dr. Gee, of London, and he advocates an expectant (do nothing) treatment. Rest in bed with cold affusions for high temperature is his method.

Garrod, of London, treats of rheumatism, and he, too, is expectant in his measures—that is, he expects the patient to cure himself. He says "manly severe cases get well on colored water." I might quote from Fagge and Loomis and other writers of to-day, but enough. Medical progress, indeed! The progress of a crab!

Now what has demonstrated the utter valuelessness, as well as the injurious influence of such treatment as we have detailed?

How were these bleeders and physickers to find out that they were killing instead of curing? Think of the multitudes of deaths which must have been precipitated by these, our blinded and erring brethren, and pour forth hosannahs to Hahnemann who inaugurated this brighter day. I assert, without fear of successful contradiction, that the major part of the increase of longevity which has marked the advancing years of our century is fairly attributable to the benign influence of homœopathy. And any candid mind familiar with medical history will yield a hearty assent.

I must insist upon being neither misjudged nor misrepresented here.

That the sciences connected with medicine have made vast strides during the present century no sane man can deny. That the arts of surgery and obstetrics have kept step in the march of progress is also true. But, with a few minor exceptions, I hold that the history of medical art (in the strict construction of that phrase) is aptly and truthfully illustrated by these quotations. And I further claim that a comparison between the rapid advance of medical science, on the one hand, and the tardy, hesitating and even retrograde course of allopathic medical art, on the other affords conclusive proof that the fundamental ideas of the old school as to the sources of medical art are fallacious and erroneous. The millennium of this art is never to come through pathology as they fondly believe. Some aid, no doubt, has been derived from this source, chiefly in the line of preventive medicine, though the main fountain

of their medical art has been empiricism, pure and simple. But the mountains and abysses of pathology will never be so tunneled and bridged by the mind of man to open a safe and permanent therapeutic highway.

Its study will always be essential to the physician in many important respects, and it will always throw valuable sidelights upon therapeutics, but the attempt to derive from pathology alone a secure and reliable basis for the application of drugs to the cure of disease, has been and must ever remain a mistake and a failure.

So much for the negative influence of homœopathy.

But it has also exerted a powerful positive influence upon medical progress. Passing over many minor matters, it has demonstrated the necessity and feasibility of a materia medica based on the effects of drugs upon the healthy instead of upon the sick; has contributed largely to its realization, and has thus developed one constant factor in the problem of cure where all else is, and must be, variable and uncertain. I hold this to be the greatest work—the crowning glory of Hahnemann and his school—the sole condition which can make medical art scientific, postulate accuracy and certainty in that art, and open the door to limitless progress.

What the homœopathic school has done for the elevation of the standard of medical education in this country embraces nearly all that has been attempted in this direction by physicians of any name or title.

To some laymen this will doubtless appear a most surprising assertion, but it is true and susceptible of proof. I appeal to medical history.

In 1868, I presented to the legislature of this State the draft of a bill for the creation of State Boards of Examiners in medicine—an institution long and favorably known in Europe, but never before exploited in America. In 1870 I made this bill the text of the annual address. My project was approved by this society, and a committee appointed to further the measure. The bill was first passed in 1871, but was vetoed. Repassed in 1872, it became a law. We at once demanded a board under this act, and a year or two later the old school felt it necessary to follow our example.

There were several reasons why this measure proved abortive in this State. It was a new thing and not all the force, influence and tactical ability of a Gray or a Watson or a Paine

or of our other co-laborers could at that time obtain such a law as we desired.

But the seed thus planted took speedy root, and to-day there are efficient boards in most of our United States. So that this whole movement—this great stride in medical reform—stands to the credit of the homœopathic school, unaided, not only, but opposed by the old regime.

In 1889 Dr. William H. Watson, a member of the State Society, and one of the regents of the University of this State, presented to the latter body a bill providing for the preliminary education of medical students.

Hitherto, be it said to the shame of our civilization, the veriest ignoramus might step from the barnyard into the medical college, and, if he only paid his professorial fees, in two years could take his stand in the ranks of what, with exquisite irony, was called a learned profession.

Dr. Watson's measure was heartily endorsed by the regents, and by them presented to the legislature. So obviously proper was it that it at once became a law, and it still stands upon our statute books, though most disgraceful efforts to repeal it have emanated from one of the old school medical colleges of New York City.

Another star in the crown of honor which graces the brow of homœopathy.

Our colleges, too, have always been pioneers in all that concerns a thorough and exhaustive curriculum as well as impartial examinations.

The Homœopathic Medical College, of New York City, was the first medical school in America to adopt a three years' graded course of instruction, and, for ten years was the only college in that city which insisted upon this advance in medical education. Its students have always been graduated upon the examination of a Board of Censors, wholly distinct from the teaching faculty. So high and consistent has been its record as to provoke from a prominent member of the old school State Society the declaration, upon the floor of that body, that if this institution would only abandon its distinctive name, it would be the model medical college of America. I have not heard that the compliment has either turned its head or changed its title.

Some years ago the intercollegiate committee of the American Institute of Homœopathy—a committee composed of

representatives from every homœopathic college in the land—recommended to that body uniform educational standards. They were heartily endorsed by the Institute, and in accordance therewith from and after the fall of 1892, each and every homœopathic college not only demands a four years' course of study, including three full terms of lectures of six months each, but, unless the matriculant can exhibit the diploma of a bachelor of arts or its equivalent, he must pass an examination embracing:

1. English composition, as exhibited in an essay containing 200 words.

2. Arithmetic to square root.

3. Geography, physical and political.

4. The history of modern civilized nations.

5. The translation of Latin prose.

6. Physics.

7. Biology and physiology.

8. Chemistry.

9. Botany.

All this, be it remarked and remembered, while Bellevue and other old school medical colleges have abandoned their brief trials of the three years' course, because their revenues were lessened by the desertion of students for places where the pasture fence was lower, and while, for the same unworthy reason these self-conceited "regulars" are begging our legislature to repeal the law demanding preliminary qualifications.

Nor is the ambition of our school yet satisfied. We hope and look for a day when there shall be a National Board of Examiners, for a higher and more distinctive degree and title than that of Doctor of Medicine—"State Physician and Surgeon." An examination to which no candidate shall be admitted without having already earned the degrees of bachelor of arts and doctor of medicine. An examination which shall be broader and deeper and higher and more practical than any which now exists in any country; an examination from which therapeutics—the hereditary and perennial battleground of doctors shall be excluded, thus destroying all distinctions of school in medical art.

Is this a dream?

Well, we shall see.

There is one source of great regret to me as it must also be to every honest, honorable and progressive homœopath. It

is this. Our school, as such, seems to have come to a halt. Time was when our numbers were increasing; our colleges were growing; able men of the old school were being converted to the new in considerable numbers; our current and other medical literature was marked by great ability; now, we seem to have passed our climacteric, and, to me, as to other thoughtful and observant men, it appears as if we were on the borders of decline.

Why is this?

Well, first of all, it is in my opinion because of the truce we have tacitly, at least, made with our opponents. They found, after many years of fighting, that we were not to be thus conquered, and they are now attempting to smother us with a show of kindness and goodwill. Doubtless some of my hearers are ready to attribute this state of affairs to the decline of what they call genuine Hahnemannian homœopathy. And, in a measure, I think they are right. Perhaps we have been a little too ready to adopt serumtherapy, X-rays, vibrators, etc., to say nothing of the numberless chemical drugs that kill pain and fever so quickly and certainly, and, with equal celerity, destroy the patient too.

But the main reasons to my mind, are the fancies, futilities and falsehoods that so encumber our *Materia Medica* that life is too short for its proper study and use. We have got to have a new and a true Medical Bible or our death, as a school, is not far away.

This has been keenly felt and expressed by many before me, and efforts made by societies and individuals to reprove our remedies, which have, and must always have no good result worth mentioning. Unorganized labor will not serve.

There is just one way. There must be a College of Provers, well supplied with money to pay handsome salaries to experts, and fair sums to those who actually do the testing.

It certainly would seem as if there must be millionaires enough who are patrons of our school who would be willing to place, in trust, one or two millions for fifteen or twenty years, the income only to be used, and the principal to revert to the patron at the end of such a period, together with the copyright of this new *Materia Medica*. The resulting knowledge of the exact relations of drugs to the healthy would be quite as welcome, and as necessary, to the old school as to us,

and no generous, broad and noble man could possibly do a deed of greater virtue.

In connection with this topic, I beg to lay before you a few facts with which I find that many of my colleagues seem to be unfamiliar—strange as it appears.

In answer to a query of mine in February, 1893, I received the following letter from Prof. St. Clair Smith. In substance it is as follows:

I will give you briefly what I know of the reasons of Dr. Allen's change of mind on the potency question.

At the last meeting of the American Institute, at St. Louis, a heated discussion arose as to the reliability of provings by high dilutions—Dr. Allen taking the affirmative. He finally said that he would bring to the next meeting incontestable proof that they were worthy of acceptance.

On his return he asked the assistance of Drs. Smith and Deschere.

The plan was to give to each prover two vials, one containing pellets medicated with a high potency and the other with blank pellets—both carefully marked in cipher. Each was to take doses from either bottle for a definite time and then the other in a similar manner. They were told that one vial contained a drug while the other did not. The object of the trial was also told them. Each physician obtained six provers.

My first subject, says Dr. Smith, was a lady who, on first consulting me, had asked me never to give her arsenic in any potency since her susceptibility to it was so great that she had been made desperately ill by one dose of the 200th potency.

It took long to persuade her to consent to such a trial, but she finally yielded. At the expiration of the stated time, she returned and triumphantly handed me the guilty vial with a list of the most startling effects it had upon her from the very first dose. These were so characteristic of the drug that she had not taken any from the second vial.

I took the vials—compared them with my cipher, and, to my amazement, found she had taken only the blank pellets.

I then asked her to take frequent doses from the other bottle for a week. She did so and came back without a scratch.

I repeated this experiment upon her for several weeks, varying my methods, and, invariably, she picked out the wrong vial.

This experience was repeated with every one of the provers, not one detected the medicated vial.

Among them, I had those who could not take Mercury nor Sulphur nor Belladonna.

Without exception Dr. Allen's and Dr. Descher's results were the exact duplicate of my own.

Dr. Allen gracefully accepted his defeat, and never thereafter did he prescribe higher dilutions than the third or sixth—more often the former.

I do not see how such experiences could have any other result in the minds of any—even the most bigoted.

The light they shed on a large part of our boasted *materia medica pura* is too obvious for discussion.

**MEDICAL AND SURGICAL CLINIC HELD BEFORE THE HOMŒOPATHIC
MEDICAL SOCIETY OF THE COUNTY OF PHILADELPHIA,
APRIL 13, 1905.**

CASE 1.---DOUBLE PREGNANCY---UTERINE AND TUBAL.

BY JOHN E. JAMES, M. D.

THE case I present you to-night is interesting because of its doubts and the apparent necessity for an early operation. Her age is 29 years; occupation, a cook. Family and general history contain nothing special as related to present condition. Began to menstruate at 12 years; married at 16 years; had what was supposed to be a miscarriage six weeks after, or two weeks after missing the flow; has had two children and two other miscarriages; for three years previous to present condition was not pregnant but had dysmennorrhea and frequent pain in both ovarian regions with increasing tenderness. In January, 1905, two weeks after missing the flow, had what she supposed was another miscarriage, passed blood and some clots, but did not have any "lump" or stringy substance as was the case in each of the other miscarriages; had headaches and morning sickness, the bleeding more or less profuse for two months, with soreness in left ovarian region; three weeks ago the flow suddenly stopped; persistent constipation, with pain in

right side sharp and shooting downwards, acute when walking and when straining at stool; drastic purges became necessary to have a bowel movement; after one week improved, but one week ago had severe pain with more obstinate constipation; two days ago was so bad she could scarcely walk, then called on Dr. Gieser who sent her to the Dispensary when she was sent up to the ward.

Upon examination we find mammæ enlarged, glands around nipple distinct and areola quite dark, abdomen not enlarged but quite tender to the touch, more pronounced on the right side, the vagina has a decided bluish color, cervix pointing outward, enlarged and soft, body of uterus large, slightly retroverted and fixed, on right side we have an enlarged fluctuating mass, on left side an irregular firm mass extending into the cul de sac.

If I take the physical signs here I would say that this woman is pregnant between three and four months. The probability is that in January she did not lose the ovum. The question is, is this pregnancy in the uterus or outside? There are two things in particular which give us tubal trouble: the first is gonorrhœa, and the next in frequency is miscarriages. As my experience increases I grow stronger in my opinion that a curettement should be done after every case of miscarriage, since it is second in frequency of the causes of tubal inflammations. Now in examining this case, with no history of having any inflammatory conditions, we have this large fluctuating mass on the right side, and another firmer mass in the cul de sac and extending to the left side. The question is, is it a tubal pregnancy? As we cannot make a history of salpingitis, I am led to the opinion that it is a tubal pregnancy. In these cases where we cannot make a positive diagnosis, the question comes up, should we operate if she be pregnant? I say yes, for experience shows us there is but little risk of the operation interfering with the carrying of the baby to full term. If you have a pregnancy and a tubal mass, or abscess which interferes, it ought to be removed, as death frequently follows such cases at the confinement. In this case we have a perfect right to operate; it is the proper thing to do to remove the mass whether it be pus or a foetus so we have no hesitancy here in doing the operation.

OPERATION:—My cut here goes through the skin and fat, down through the fascia covering the recti muscles, the edges of which I separate at the linea alba or near it. I do not make a large incision to start with at least, as it is more in the line of

what you might call an exploratory incision ; separate the fibres, pick up the peritoneum between two tissue-forceps. If there is any intestine or omentum underneath, these will fall back when I let the air in. Now I enter the abdominal cavity and look for the uterus, and here I find it well back, a large uterus, the probability is that it is pregnant for some three or four months ; upon this side I find quite a large mass, this is bound down by adhesions and I will simply mow them off and loosen the tube from all of its adhesions. Here is the dark colored tube full of blood, etc., the ovary is in its normal condition. No apparent rupture of the tube as yet. I am going to leave the ovary in, but I will remove the tube. I will not touch the ovarian artery from this side as I would have to go down into the broad ligament for that ; I avoid the artery by cutting with scissors under the tube, I simply cut off the top of the broad ligament and will afterwards whip over the broad ligament which I have cut off with an ordinary running whip-stitch. There are no vessels of any size here, but such as they are, this running stitch will usually control. The foetus here is free in the abdominal cavity, having undoubtedly slipped out of the opening in end of the tube, and in addition the uterus is pregnant as we can distinctly feel the baby within it. The appendix here is about five inches long, and Dr. Van Lennep would not let me leave it in as it would not be safe. We can trust the tubes even in old cases of pus sometimes, but cannot trust the appendix, so I will remove it in usual way. I have a sort of a dread of handling the abdominal contents any more than is absolutely necessary ; it always adds to the shock, but had I found any pus in the part we would wash the cavity out, here we will mop the few blood clots out and let the peritoneum take care of the rest. Whenever there is any free pus in the cavity from any source *wash out* the cavity freely. In such cases I rarely drain, only where I cannot possibly remove all the pus ; when I do drain, it is through the vagina. Draining ought to be from the bottom and not from the top of a wound. I will now close up the abdominal cavity by whipping the peritoneum, bringing the surfaces quite broadly together, these will unite in twenty-four hours ; do not try to unite the edges, but take a free bite in it and bring the surfaces together in that way. Now I have the peritoneum carefully closed up. My plan of closing up the abdomen usually is to now use a permanent suture. I sometimes use fine silver wire or chromocised gut, but

usually I prefer silkworm gut introduced so as to bring one side of the sheath of the recti muscles upon the other instead of bringing the edges together thus making a mattress stitch. This makes a strong abdominal wall. Rarely do we get a hernia from a stitch of this kind; this makes the second layer. In closing the abdomen remember that the strength rests in the tendon of sheath of the recti muscles. The last stitch will simply be a subcutaneous stitch with catgut or linen thread—bringing it together with a running subcutaneous stitch.

On looking at the specimen, we find that the pregnancy occurred in the free end of the tube, which is the most usual place; when it occurs nearer the uterus it sometimes distends the tube like an aneurism and most of the cases that go on to full term as tubal pregnancies occur at this part of the tube. In this case, as you see, the foetus has come out of the os abdominale into the peritoneal cavity, the placenta has closed the os and all the bleeding has been within the tube and it did not rupture, hence, as you observed, we had very little blood in the abdominal cavity.

I do not apprehend any trouble in this case, but believe she will go on to full term with the pregnant uterus uninfluenced by what we have done to-night.

**CASE 11.—A CASE OF CATARRHAL INFLAMMATION OF THE GALL-BLADDER ASSOCIATED WITH PANCREATIC DISEASE,
AND PROBABLY ORIGINATING IN DUODENAL ULCER.**

BY CLARENCE BARTLETT, M. D.

THE case which I shall present to you this evening is one of more than ordinary interest. Considered in the light of the medical knowledge of several years ago, it very readily might be passed over as one of intractable gastric disorder; but reviewed from a more modern standpoint, it presents an unusual clinical problem. The patient is a young man, aged twenty-four years, a slate quarryman by occupation. The following history of his case is from the Hospital records:

FAMILY HISTORY.—His father died of cancer of the stomach at the age of 56 years; his mother is living and well at the age

of fifty-six years. He has one brother living and well; and another one living has "heart trouble." One brother died of typhoid fever, and another of "brain fever" at the ages of 12 and 14 years respectively. He has four sisters living and well. You will see from this that there is nothing in the family history which can be of much avail in suggesting a diagnosis.

PERSONAL HISTORY.—Mumps is the only disease of childhood, from which he suffered; denies any venereal infection. Was treated for gastric catarrh in the A——n Hospital from February 17, 1905, to March 6, 1905.

HISTORY OF PRESENT ILLNESS.—The patient believes himself to have been in good health up to six months ago, at which time he was seized with a feeling of distress about the upper portion of the epigastrium, associated with some distention in the same locality. This subsided after a few days, but the patient was confined to his bed for about six weeks suffering from distress after eating, tenderness in the epigastrium, pressure causing pain to radiate through to the back. He vomited three times during his illness, but in no instance did the vomited matters contain any blood. The materials were bitter and yellow one time, and exceedingly sour another. Nausea has been persistent; appetite poor; tongue moist and coated; breath offensive; solid food causes a sensation of heaviness in the abdomen; bowels usually constipated, though at times diarrheic. Colicky pains in the abdomen have occurred about eight times in the course of the illness; morphia was required for relief in the last one.

At the time of his admission to Hahnemann Hospital (March 8, 1905.), his principal complaint was a loss of appetite, feeling of soreness across the epigastrium aggravated by any exertion or by the taking of food; loss of weight, and general nervousness.

The physical examination made on March 8th, gave the following results:

The patient's general appearance was by no means bad for a man who had been ill for six months or more. His color was good; his mucous membranes presented no abnormality. He exhibited a nervous manner. The heart and lungs were normal. The interesting features related entirely to the abdominal examination. Inspection showed at the upper portion of the epigastrium, a decided fulness. There was also a fulness readily visible over the region of the gall bladder, but

more careful investigation showed that this same prominence continued down the right side of the abdomen, and palpation showed it to be dependent upon rigidity of the right rectus abdominalis. Palpation demonstrated also epigastric rigidity. Three foci of tenderness were readily discovered, as follows: 1. Over the uppermost portion of the epigastrium and corresponding to the swelling; pressure gave a sense of pain located sufficiently deep for the patient to describe it as "almost to his back." 2. Over the gall bladder; and 3, posteriorly, two fingers' breadths to the right of the vertebral column and on a level with the tenth to the twelfth ribs. The latter point was unquestionably the best marked. The urine presented no features of interest on routine chemical and microscopical examination.

The first part of the problem before us was the diagnosis of the case, and I had in mind gastric ulcer, disease of the gall bladder, and pancreatic disease, singly or in association. Gastric ulcer was suggested by the aggravation of pain after eating. But against it, was the sudden onset of the illness, the absence of blood in the vomited matters and stools, the analysis of the gastric contents, which showed a lowered total acidity and a diminished hydrochloric acid percentage. Five years ago, I would have unhesitatingly declared against ulcer of the stomach in this case; but since the publication of the surgical experiences of Robson and Moynihan in England and of the Mayo brothers in this country, I have felt that we must recast our diagnostic data of stomach disorders in general and of ulcer and its consequences in particular. So now I give an opinion that gastric ulcer is probably absent. Certainly its existence is not necessary to explain the clinical phenomena of this case.

In favor of disease of the gall-bladder, there is strong clinical evidence, so much indeed that I have no hesitation in diagnosing either gall-stone disease or catarrhal cholecystitis. The tenderness over the gall bladder is unquestionable, and has continued so up to the present time. You can see how our patient winces as soon as I make pressure. Next I proceed to make pressure posteriorly between the tenth and twelfth ribs and to the right of the vertebral column, and you observe that the tenderness is even greater than over the anterior point. Boas, who first directed attention to this symptom, regards its diagnostic importance as very great. In neither place, how-

ever, is the sensitiveness as well defined as when the patient was admitted to the hospital. Nor do we now observe any perceptible rigidity of the right rectus muscle. The fact that at no time has there been jaundice does not militate against the diagnosis of disease of the gall bladder.

Thus far, the case as analyzed presents no unusual features. Cases of gall bladder disease are of common occurrence. But it is when we make an attempt to determine the nature of the epigastric pain that the case appeals to us as out of the ordinary. At the present time, the fulness and sensitiveness over the upper portion of the epigastrium have disappeared. In other words, the condition which gave rise to them, is probably a thing of the past. I can hardly conceive it possible that these symptoms in this location are explainable on the assumption of gastric disorder. I therefore thought of the possibility of pancreatic disease. Now what have we in favor of such a diagnosis?

Until Fitz and Opie among physicians, and Robson and Moynihan among the surgeons, published their studies of pancreatic disorders, our means of diagnosis were in the highest degree uncertain. I doubt if we could even hazard an intelligent guess. With the knowledge they have given us, things are different. The problem when solved is not so difficult after all. As you all know, the main duct of the pancreas,—the duct of Wirsung,—joins the common bile duct in the ampulla of Vater. Pathological studies have demonstrated that primary disease of the bile passages, but especially obstruction at the duodenal orifice of the common duct, may be succeeded by secondary pancreatic disease, especially pancreatitis. Indeed, gall bladder disease may along with disease of the duodenum be regarded as including our entire present knowledge of the etiology of disease of the pancreas. In this case, the positive evidence of a cholecystitis shows the cause of a pancreatitis to be present. The pain and bloating in the upper portion of the epigastrium give us additional suggestions in the same direction. Here let me remark that many of our errors in diagnosis originate in a desire to have too many data to establish our conclusion. The surgeons of to-day have no hesitation in diagnosing an appendicitis in the presence of pain and sensitiveness over the McBurney point; cholecystitis, on the discovery of pain and sensitiveness over the Mayo-Robson point; and now we may add another, but more generalized

diagnostic aphorism, namely that the symptoms of peritonitis localized to the upper epigastrium, suggest pancreatitis, especially in conjunction with obstinate constipation. Of course, we must have certain associated symptoms in each of these cases, but none of these have any real diagnostic value, excepting as they cluster about the main features of the several cases cited, and serve to strengthen the diagnosis. Without the central or guiding symptom, they would be valueless. While on this subject, I may be pardoned a digression,—some remarks on an entirely different subject, namely intestinal perforation in the course of typhoid fever. Statistics prove that many thousands die each year from this accident. Surgical experience shows that early operation is capable of saving many cases. In the past, we have been accustomed to waiting until the diagnosis of perforation is absolutely certain; that is to say, we wait for symptoms which we have been taught are the symptoms of perforation. Thus the case is brought to the operating table when all hope is gone. We now have every reason to believe the symptoms which we have so fondly held as evidence of perforation to be the symptoms of peritonitis.—in other words, of peritoneal infection. Naturally then, we cannot wait for their appearance if a diagnosis is to be of any practical avail. The search for a pathogenetic symptom or combination of symptoms has thus far been of no avail. Loss of liver dulness is sometimes useful; but it is too unreliable for regular guidance. In keeping with previous advances in knowledge, I am preparing myself to believe that the supervention of a localized muscular rigidity of the abdominal walls with or without pain, with or without disturbance of temperature, but occurring in a case whose progress has been unsatisfactory, and continues to be more so, should suggest to our minds a strong probability of intestinal perforation, and make us ready for surgical intervention. It is inconceivable to me that temperature and pulse changes are necessarily present from the first, or indeed that they occur at all until there is an actual supervention of a peritonitis. Muscular rigidity,—Nature's own method of enforcing rest to diseased parts,—must be regarded as the earliest of all evidences of peritoneal lesions. Do not wait for collapse or hæmorrhage! Take the clinical course of the case, and the supervention of local muscular rigidity as your guide. Of course I assume that due respect will

be paid to the typhoid toxæmia and the daily grouping of symptoms.

To return to the subject of pancreatic disease, and its relation to our present case. Robson published in the *Lancet* about one year ago a method of diagnosing disease of the pancreas by the examination of the urine. This test is somewhat time consuming, but after a few trials, it can be completed in one hour. My first effort with it required 55 minutes for each part of the test; but with more efficient methods of heating the sand bath, which is the most tedious part of the test, can make a great saving of time. With a little practice, one can moreover carry on both parts of the test almost simultaneously; thus the reactions may be made in 45 minutes. Robson's pancreatic reaction in the urine requires the following reagents and apparatus:

A sand bath; a flask capable of holding 50 cc.; a two-ounce beaker; glass funnel; filter paper; Bunsen burner; strong hydrochloric acid; lead carbonate; sodium acetate; phenylhydrazin hydrochlorate.

To apply the test we proceed as follows: We must first insure the absence of sugar and albumin from the specimen to be examined. This having been done, we may proceed. Discovering either, we must get rid of them. Sugar may be eliminated by the fermentation test with subsequent boiling to expel the alcohol formed; and albumin by the application of heat, acetic acid and filtration.

The urine must be filtered. We are then ready to proceed with what Robson calls reaction "A". 10 cc. of the filtered urine is placed in the flask, along with 1 cc. of strong hydrochloric acid. A small funnel is next placed in the neck of the flask to act as a condenser, and the whole put on a sand bath, and boiled gently for ten minutes, counting the time from the first signs of ebullition. We then pour into the flask a mixture of 5 cc. of the filtered urine and 5 cc. of distilled water. We now cool the whole in running water. Next we neutralize the excess of acid present by slowly adding four grammes of lead carbonate to the flask contents, now removed to the beaker. When this reaction is completed, the mixture is filtered through *moistened* filter paper, and the beaker washed out with 5 cc. of distilled water on to the filter. To the clear filtrate, we finally add 2 grammes of powdered sodium acetate and 0.75 gramme of phenylhydrazin hydrochlorate, and boil the mixture for

three or four minutes over the sand bath. The hot fluid is then transferred to a test tube and permitted to stand for twenty-four hours, or until the reaction is manifest. This reaction consists of an abundant flocculent deposit, which in well defined cases may appear as early as one hour. This when examined under the microscope should consist of abundant sheaves and rosettes of golden yellow crystals. The microscopic examination is essential, as a deposit of an amorphous substance may simulate the pancreatic reaction as observed by the unaided eye.

Reaction "A" is not to be regarded as infallible, for it may occur in cases of cancer, adenitis, pneumonia and other diseases in which active tissue changes are taking place. As a control, therefore, we must resort to reaction "B". This depends for its value upon the fact that in cases in which pancreatic inflammation is present, the addition of mercuric chloride to urine before applying the test, interferes with the reaction. It is carried out as follows: 20 cc. of the filtered urine are thoroughly mixed with 10 cc. of a saturated solution of mercuric chloride. The mixture is filtered after standing a few minutes, and to 10 cc. of it, 1 cc. of strong hydrochloric acid is added. The mixture is next boiled over the sand bath for ten minutes, diluted with 5 cc. of the filtered urine and corrosive sublimate solution and 10 cc. of distilled water. Subsequent steps in the test are identical with those of reaction "A".

Our patient's urine has been tested four times by the above method, once by myself, twice by Drs. S. W. Sappington and J. Dean Elliot, and once by Dr. G. H. Wells. In every instance the result was the same. Reaction "A" was positive, and reaction "B" negative. So if Robson's pancreatic urinary reaction is of value, our patient must have pancreatic disease.

We next proceeded to determine the presence of other phenomena suggestive of pancreatic disease. The stools were carefully examined by Dr. Sappington for excessive fat and muscular fibres with negative results. The patient was given 150 grammes of glucose in the morning fasting, but no alimentary glycosuria resulted.

Our sole evidence then in favor of pancreatic disease was the cholecystitis, the pain in the upper epigastrium, and the pancreatic reaction.

An examination of the patient's blood by Dr. W. H. Lyle was negative as to the discovery of any abnormality.

The patient was put under an absolute milk diet with rest in bed. Belladonna was first prescribed, and after a few days, the remedy was changed to nux vomica, which has been continued to the present time. Since April 1st, I have not seen the case until to-day, as I went off hospital duty at that time, and Dr. J. C. Guernsey succeeded to my cases.

The patient has made a most satisfactory improvement. All ordinary evidence of pancreatic disease has subsided, but the sensitiveness over the gall bladder continues. It is very evident that whatever may be the condition present, it is a persistent one. The practical question now before us is shall we rest content with what we are doing, or shall we have recourse to surgery? Before deciding this question let us consider a few facts. The patient most assuredly has a cholecystitis, whether dependent upon calculus or not we cannot say. But we do know that disease of the biliary passages is capable of setting up hæmorrhagic pancreatitis, a rapidly fatal disease, requiring prompt operative interference, and even then offering a large mortality. The gall bladder seems to be a storm centre, having aroused serious mischief once, it may readily do so once more. In a young patient like ours, an exploration is attended by comparatively little danger, and I have advised such operation to our patient, and he has consented.

OPERATION ON DR. BARTLETT'S CASE BY DR. WM. B. VAN LENNEP.*

THE hour is late, and we have had a most interesting and instructive evening, so that I will ask your indulgence for a few minutes only, to carry out an exploration upon the case presented to you by Dr. Bartlett.

This patient, by the way, seems to me to indicate the manner in which the physician and surgeon should work together. Dr. Bartlett has studied the case and carried out the medicinal, dietetic and general treatment for a *reasonable* length of time (note the emphasis upon the word *reasonable*, which is intended to mean "intelligent"). Then he and the surgeon studied the case together and while we may have been at variance upon the value of some of the diagnostic points, we are thoroughly in accord on the practical one, the advisability of exploration with a

*From Notes taken by Dr. McEldowney.

reasonable therapeutic prospect, and in this the patient has fully concurred—a most desirable addendum!

We should bear in mind, however, that this much being done, the surgeon assumes full responsibility and while in those cases which may be said to belong to the “too late” class, the blame for a fatality is unjustly laid at his door, nevertheless such is public opinion and besides, he gets most of the glory for a successful outcome!

I spoke, a moment ago, of an exploration and this I will now make in such a manner as to render accessible the stomach, the pylorus, the duodenum, the head of the pancreas, the gall-bladder and the bile ducts. The incision is carried to the right of the median line, between the rib-border and the umbilicus, through the skin and fat. After catching a bleeding point or two, the rectus sheath is opened, the fibres of the muscle split or separated, after dividing one of the *lineae transversae*, with the fingers or the handle of the scalpel. The posterior layer of the muscle-sheath is next picked up and opened between tissue-forceps, when, drawing on these instruments, the peritoneum is nicked and, as the intruding air pushes away the abdominal organs, the opening is quickly enlarged to any extent with scissors over a guiding and protecting finger. Grasping the edges of the wound with hæmostats, the retractors first suggested by Lawson Tait who was the pioneer of simplicity in abdominal work, we are ready to proceed with the intra-abdominal “exploration.”

When we recall the organs already mentioned as accessible from this incision, we can appreciate why it has been said to be immediately over the “storm-centre” of the upper abdomen. A small opening in this location has been very aptly termed by Mayo-Robson, the minor abdominal section; one that can be carried out under local or nitrous oxide anæsthesia to an extent sufficient to admit one or two fingers; one that can be enlarged to any degree for operative work according to the conditions found.

Such exploration is desirable in either acute or chronic conditions in the upper abdominal zone, both on account of their obscurity, as well as the dangers of delay. For example, acute pancreatitis, simulating as it does bowel obstruction, needs only the suggestion that it is in this zone to call for immediate incision high up; so too the posterior gastric perforations of ulcer with their tendency toward the dark subphrenic realm, or

those in the duodenum which often closely simulate gall-stone colic or acute appendicitis. Fortunately these conditions usually demand some kind of a section and that imperatively, and the up-to-date surgeon will usually locate the trouble once the abdomen is opened, so that it only remains to incise in the right place. The same is equally true of the chronic lesions; for example, an ulcer which is allowed to drag on to crippling adhesions, to stricture or to sneaking perforation; a cholecystitis going on to contraction and inaccessible burial in adhesions; a biliary calculus in the ampulla of Vater supplementing its intermittent jaundice by an acute or chronic pancreatitis; and above all carcinoma quietly throwing out its metastatic arms until beyond all hope of removal.

The next point to which I would call your attention is the position in which the patient has been placed, *i. e.*, with a sand-bag directly under the liver. The result of this you will better appreciate now that the abdomen is opened, for you can note how the subhepatic organs sag away by gravity, giving a clear view of each and every one and a free working-space, unobstructed, as is usually the case, by the protruding colon and omentum. The head and shoulders are raised to a corresponding degree and this is particularly desirable in this patient who appears to take his anæsthetic badly. In the case operated by Dr. James, earlier in the evening, the pelvis was elevated for a similar purpose and here we have done the reverse; we have placed our patient in what I might term the Trendelenburg position of the upper abdomen. I believe Mayo-Robson first suggested it, so that we are in the habit of calling it his position.

Now for a systematic examination of all accessible organs:

I first draw out the stomach and find it empty and contracted, because it has been irrigated and evacuated by the tube and sterilized too by frequent mouth-washings with weak carbolic solution to be ready for operation if necessary. The examination of the stomach is not complete without inspecting and palpating the cardia and fundus, an occasional seat of latent ulcer. This being negative, I pass to the "grinding" portion, that bordering on and including the pylorus, the usual location for ulcer as well as cancer, giving careful attention to the lesser curvature where lymphatic infections first appear. In examining the pylorus we should remember that a gastric ulcer, like an anal fissure, is apt to produce spasm of this

sphincter, which may later result in fibroid changes and retraction, the counterpart of "fibrous stricture"; we have seen several instances in this clinic.

Passing now to the duodenum, I find in the posterior and upper wall of its first position, considerable thickening and puckering of undoubted cicatricial character, but not encroaching sufficiently upon its lumen to cause obstruction. That the inflammation has reached the peritoneal coat is readily shown by these soft adhesions. The first lesion then is a duodenal ulcer of the first portion, which has apparently healed and which has not strictured the gut. In such a case the acid test is not affected; there is pain and tenderness to the right, front and back; there are attacks of pain, often simulating biliary colic; distress after eating is late or absent, and blood is rarely vomited and often overlooked in the stools.

Duodenal disease, in the next place, is apt to induce trouble in the pancreas and bile-ducts. The head of the former is the part usually affected in a chronic inflammatory process and such enlargement should be felt in the grasp of the duodenal horse-shoe. If present it cannot be recognized here and from the clinical history it should have disappeared.

By enlarging the incision into the notch between the rib-border and ensiform, I am able to turn the liver on to the chest and expose the bile-ducts in their entirety. They contain no calculi and, in the absence of jaundice, we should hardly expect to find these in either the common or the hepatic. Finally, I draw the gall-bladder, which is considerably distended, out of the wound, with a hæmostat, and cannot find here either, after most careful palpation, any evidence of stone. Its walls, however, show signs of cicatricial changes, so that with the clinical history, the localized tenderness and the rigidity, I have no hesitancy in diagnosing a catarrhal cholecystitis and necessarily a coincident cholangitis, a very common cause for which is duodenal inflammation. As I open the gall-bladder close to the hæmostat with scissors, the thick, ropy mucus admixed with bile and even what appears to be muco-pus verifies the diagnosis. It not infrequently happens that on opening the gall-bladder in a patient giving the history of attacks of biliary colic, the surgeon is disappointed and at times discredited by not finding gall-stones. It has been shown that these attacks may be equally well induced by this same thick, inspissated muco-pus, and the catarrh is cured,

whether stones are removed or not found, by drainage. Of late, cholecystectomy has become quite a fad with some, the essential drainage being accomplished by *tubing* the ducts. In this clinic we have come to follow a middle course: removing the gall-bladder, entire or in part, if it is badly infected or gangrenous; otherwise draining through a cholecystotomy or "ostomy"; the latter termination being applied to those cases in which the gall-bladder is stitched to the skin or peritoneum, the drainage therefore being of longer duration or permanent.

I now introduce a drainage-tube into the gall-bladder and throw a ligature around outside to prevent leakage; I further protect the peritoneum by an iodoform gauze pack all around, which can be withdrawn in a few days. Finally, I proceed to close the balance of the wound by a continuous suture of ten day chromic gut: first, through the peritoneum and posterior sheath; back to include the anterior sheath and draw together the separated muscular fibres, tying the two ends at the point of starting. The skin and fat are accurately coapted by this running button-hole stitch of celluloid thread, the dressing consisting of wet, sublimated gauze, held in place by strips of adhesive plaster.

NOTE BY DR. BARTLETT.

The operation demonstrated the presence of a catarrhal cholecystitis and cicatricial tissue in the duodenum, with a normal pancreas. It is reasonable to believe that the duodenal ulcer was the primary lesion, the cholecystitis and the alleged pancreatic disease being secondary. The symptoms arising from the duodenal ulcer suggested the diagnosis previously made of gastric ulcer, but which was not confirmed by the presence of the classic symptoms of that disease. Notwithstanding the fact that the pancreas was found normal on exploration, I feel fairly confident that it had been diseased, but the inflammation, fortunately not of a high grade, had disappeared. An examination of the urine for the pancreatic reaction, made the day after the clinic, gave a negative result. The previous examination of the urine of the same character was made four weeks before operation. Respecting the disappearance of the pancreatic reaction, Mayo Robson says that it usually continues for some little time after recovery. This case seems to be contrary to his experience, for pancreatic pain had disappeared but ten days to two weeks prior to operation.

CASE 111.—DILATATION OF THE STOMACH.

BY O. S. HAINES, M. D.

MR. PRESIDENT, LADIES AND GENTLEMEN:—If you will bear with me, I purpose to offer for your consideration, during the short time at our disposal this evening, the more striking clinical characteristics of a case of gastric dilatation. If I seem to review merely the elements of this subject, you will understand my object to be a desire to establish the facts that dilatation of the stomach is a condition more or less commonly met with, quite easily recognized if we follow a simple procedure, having very tangible physical signs; dependent upon various pre-existent gastric lesions; calling emphatically for certain well defined therapeutic procedures. In short an ailment either quickly recognized, or as easily overlooked; if one ignores physical methods in his examination.

I am describing this case from the standpoint of the general practitioner. There are certain features about this case that appeal at once to the eye and which need no further comment. You observe:—

Marked emaciation in a man whose normal weight would stand about 149 pounds. You mentally try to determine whether his appearance denotes *cachexia* or whether it might be described as an anæmia secondary to prolonged illness and lack of sufficient nourishment. I fancy the latter explanation is more likely to appeal to your judgment.

He has been ill about one year.

What has been his most prominent symptom during the past year? I can answer that in a word—*vomiting*, the vomiting of gastric irritation at first. I must ask you to notice that at the beginning of the trouble he vomited *after eating food*. Now he does not vomit after food, but daily at different times. It seems to us that we may explain this change.

A year ago, food caused much gastric distress, this was quickly relieved by vomiting of the stomach contents, food and stringy mucus. Solid food caused more distress than fluids, and the pain was accompanied by soreness and sensitiveness to pressure beneath the manubrium sterni. Burning pain was present. It seems reasonable to decide now, that the lesions present at that time were those of a gastric catarrh—a catarrhal gastritis. I will, however, ask you to join with me in a suspicion—I think we may say, a reasonable suspicion—

that there may have been gastric erosion or ulceration in addition—the peculiar sensitiveness produced by solid food—the sensitiveness to pressure more or less localized—the prompt relief from vomiting even although no history of hematemesis can be elicited—*would* seem to justify such a suspicion. And such a suspicion alters, to some degree, the theoretical explanation which we must presently offer regarding the primary cause or causes of his dilatation.

Coming now to his present type of vomiting. We find that it is a vomiting that is produced only when the stomach has become filled up to a certain line, with semi-fluid contents *retained*, instead of having been expelled from the stomach into the upper intestine.

His present vomiting then is of the type characteristic of gastric dilatation—it is *not* attended by nausea. It is only preceded by those subjective sensations which are expressive of mechanical distension.

He feels full in the left hypochondrium. He feels the upward and downward pressure of over-distension. An offensive tasting fluid may regurgitate into the pharynx perhaps. Then his stomach empties itself spasmodically; or, even without effort, like a simple regurgitation without retching.

And here we note another characteristic of gastric dilatation, *the amount is large*—it is an accumulated amount. It is offensive in odor—contains mucus, stringy mucus—undigested particles and fermenting debris.

Now I can add but few more symptoms to what have already been described. He is constipated, his stools are hard and infrequent. This could easily be explained when we remember that there is little food that reaches his intestinal tract; and that which does, is of a kind not likely to produce much residual debris for expulsion.

He is weak, which needs no comment.

He is not hungry. When we look at his tongue and remember the associated gastric catarrh, we are not surprised at that.

Now let me offer you the tangible evidences of the dilatation of the stomach. In order that this may be done successfully, I will ask your indulgence while we prepare him for demonstration.

Dr. Godfrey will first empty the stomach, and then he will inflate that organ gently with air. The emptying of the stom-

ach of its retained contents, is merely a precaution which I think justifiable. But I will ask you to note a simple and effective method of performing gastric lavage. Those of you who are familiar with the imperfections of the procedure as performed by the soft tube and funnel, will be pleased to observe that this plan ensures complete cleansing of the stomach walls of all mucus and adherent debris. I am not sure that we always succeed in doing this by the usual method. I trust also that it may appear to be attended by less gagging, less flow of mucus because we do not irritate the fauces by movement of the tube up and down, and complete control of the quantity of water introduced. We know the capacity of our pump.

The patient is free from the annoyance occasioned by change of posture or movement of apparatus. While it must be evident to you all that in the present instance, the apparatus is in the hands of an operator who is expert in the highest degree; yet we may all expect to meet with a considerable measure of success when we attempt the procedure.

You can now observe that the dilated organ is expanding under the air pressure and may be outlined by percussion, without difficulty.

I can feel assured that many of you detect, even at your distance, the difference between the tympanitic note of intestine and stomach.

I can determine the location of the pylorus by pressure—which sends air through it to the intestine.

I will ask you to note how high above the lower edge of the organ it seems. It explains the impossibility of emptying such a cavity unless the patient stood upon his head.

Thus at least one factor in the production of the retention becomes apparent.

I might have given the patient a seidlitz powder in two portions and obtained distension by the gas evolved in the resulting effervescence, but with such a method, one can hardly control the amount of pressure. We obtain either too much or too little, and you must admit that these procedures are attended by a certain small element of danger.

I will now partially fill the organ, and elicit for you the physical sign known as “splashing.” Too much dependence must not be placed upon this as an evidence of dilatation.

We must leave this interesting phase of our demonstration now, to consider the factors which may have been responsible

for the condition, and the indications for our treatment of the case.

I cannot say that he has cancer of the pyloric end of the stomach, because he is not cachectic, because there is nothing in the history bearing out such a statement, because there is no tumor to be felt at the location of the pylorus; even at this well developed stage of the dilatation. The analysis of the stomach contents, after a test meal, shows the presence of hydrochloric acid and the absence of lactic acid. This latter observation concurs with the previously expressed opinion, but is not, of itself, decisive. We must consider some other sources of pyloric obstruction. Cicatricial tissue changes about the pylorus is a rather common cause. We cannot exclude this cause here, after the "suspicion" which I have previously asked you to share with me. Again, following such a high grade of catarrhal inflammation, as previously existed in this case, we must always admit the possibility of hypertrophic changes and swelling about the pyloric end of the organ, which might cause marked obstruction. I believe that we can reasonably exclude *pressure* from conditions *without* the stomach in this case. I regret, therefore, that we must admit the possibility of there being an obstructed pylorus in this case, because if such be the case, we shall have to call to our assistance, the resources of modern surgery. We cannot hope to cure an obstruction dependent upon mechanical factors, and which has produced dilatation, by any treatment which does not include drainage of the dilated organ either by a gasto-enterostomy or some operation having for its object the restoration of the outlet of the stomach. Fortunately, in the absence of malignant disease, the prognosis of such operations is to-day most encouraging. I had hoped to say that the cause of the dilatation, in this case, was simply atony incident to prolonged catarrhal gastritis. That is a factor, but not the only one, I am afraid. Who shall say without exploratory incision? And this last court of appeal is at the disposal of the physician in every case of gastric dilatation that resists the therapeutic methods followed for its relief or cure. We cannot consider the subject of *Treatment*, in-extenso; we can only outline the treatment proposed and followed in this particular case. Dr. Joseph Guernsey, of the Staff, has the patient in charge and has very courteously permitted me to show him this evening.

The internal medicament is of great importance. In this

case it was, at first, *nux vomica*, 30. Afterwards it was *antimonium crudum*, 3. *Gastric lavage* is of still greater importance. Daily washing of the stomach removes all retained, fermenting materials, permits better digestion of food, tends to produce tone of the stomach walls, and helps contraction. Diet must be carefully considered. In a general way we may advise that *small meals* be given, not much fluid because it distends, no sweets or fats because they ferment. We can assist stomach digestion by the artificial gastric ferments. I can report that after only one week's treatment, the patient has entirely ceased vomiting, has gained in color and appearance, is stronger, has but half as much residuum in his stomach each day as shown when that organ is emptied. If we are persistent and systematic in such treatment, we may accomplish much in this condition.

NOTE.—Two weeks later the patient failing rapidly, operation was undertaken by Doctor Van Lennep, in the regular college surgical clinic. A classical "hour-glass" or bifid stomach was found, the stricture, which consisted of such extensive scar tissue as to suggest malignant disease at first sight, dividing the emptied stomach into two equal halves. It formed an annular mass from the lesser to the greater curvature, front and back, and when the stomach was opened would not admit the tip of the little finger. The stricture was divided by a transverse incision, in the long axis of the stomach, to such extent that when sutured vertically, from lesser to greater curvature, the lumen of the organ was uniform or restored to the normal (a gastropasty on the principle of the Heineke-Miculicz pyloroplasty).

PNEUMONIA.

BY R. A. BAILEY, M. D.

(Read before the Hahnemann Medical Association of Louisiana, January 23, 1905.)

IN the selection of a paper to be read before our annual meeting, I could think of no subject more appropriate for discussion than pneumonia. At this season of the year it is most prevalent, particularly in the cities of the North, and its mortality still ranges high. It may be stated that this affection

occurs less frequently in the cities of the South, no doubt owing to the comparative mildness of the winters. Very little has been added to our knowledge of the distinctive diagnostic features of pneumonia of late years, but the pathology of this disease is certainly much better understood. The two divisions of this form of pulmonary inflammation, on account of their marked differences, are properly classed as distinct affections. A better conception of the pathology has cleared the field, as it were, for more accurate treatment, and this applies to both schools of medicine. The dominant school continues to rely mainly on an expectant plan of treatment, in which cardiac and nerve stimulants are used to the greatest extent. Of late, however, since the microbic origin of pneumonia is accepted beyond question, antiseptics measures have come into vogue. Credit is due to this school for lowering the death rate from pneumonia in recent years. The Hahnemann school, with its simpler and more accurate method of therapeutics, may, nevertheless, yet claim a superiority in successfully coping with this high rate of mortality disease. In extreme cases, in which toxæmia and cardiac failure are prominent factors to be considered, modern men of our school are now questioning whether we can dispense with the so-called antiseptics and stimulant adjuvants, and rely entirely upon specific medication.

Acute lobar pneumonia is usually a disease of limited duration; that is, it tends to end by the process of crisis on the ninth or tenth day of the attack. Therefore, without any serious complications arising, a case might run its course favorably if simple sustaining treatment only was followed. But the physicians of the Hahnemannian school may well contend that the chances of recovery are enhanced for these cases by their remedies, which certainly modify and shorten the inflammatory process present. The stages of this variety are usually clearly defined and easy to demonstrate by careful physical examination. It is generally sudden in its onset, and the symptoms are apt to be indicative of a severe form of pulmonary inflammation. Exposure to extreme cold, so common in the northern section of this country, is the most frequent causation. Persons that are in robust health, as well as the debilitated, are equally liable to contract this form of pneumonia. A decided chill is soon followed by a rapid rise in the temperature, and, as consolidation of lung tissues takes place, respiration is more

or less interfered with. A single lobe is usually involved at a time, but often the disease is confined to the primary one affected.

Broncho-pneumonia, in contra-distinction, is disseminated through both lungs, as it begins in a bilateral bronchial inflammation, which afterwards invades the bronchioles and alveoli. It is also a sequel of exanthematous and other infectious diseases. The temperature in some cases is not much elevated above what might be expected in the ordinary bronchitis, and unless careful physical examination is made, the pneumonic process may be overlooked. Patients would present themselves for treatment at the free clinics of the Hahnemann Hospital, Philadelphia, supposing they were suffering merely from catarrhal trouble. The clinical professor, however, was able to demonstrate the different stages of pneumonia existing at the same time in various areas of the lungs, for the instruction of the students. For this reason, this variety runs a more prolonged course, ending by the process of lysis instead of crisis. Touching briefly upon diagnosis, it may be stated that crepitant râles, heard at the end of inspiration, denote the stage of consolidation in progress; while subcrepitant râles, heard during inspiration and expiration, denote the stage of resolution. Broncho-vesicular breathing goes with the stage of engorgement, becoming more marked in that of consolidation. Vocal fremitus is exaggerated in consolidation, it is absent in pleuritic effusion. Respiratory murmurs diminish and disappear in consolidation. Percussion elicits dullness in consolidation, but never flatness unless pleuritic effusion or pulmonary oedema is also present. The tenacious character of the sputa is considered pathognomonic, to which is often added, in consolidated tissue, a rusty color.

In the matter of prognosis, much depends upon the amount of lung tissue involved, the constitution and age of the patient, and the appearance of profound toxæmia symptoms. It is always well to learn the past history of the individual in order to determine what dyscrasias may also exist and modify an otherwise favorable prognosis. The presence of tubercle bacilli in sputa would indicate a tubercular infection of the lungs, the pneumonia being secondary thereto. When it comes to pathology, the greatest stress is placed to-day, by pathologists, on the causation of both varieties of pneumonia by specific micro-organisms, the pneumococci, which brings

this disease almost in the class of infectious disorders. As soon as this theory was admitted, as a fact, by the profession generally, an additional theory was then advanced by the pathologists, that the condition of toxæmia, inducing in its turn cardiac paresis, was the result of the accumulation in the blood of the toxine, principles of the micro-organisms. Treatment must now be confined mainly to the antiseptic and heart stimulant remedies, according to the dictum of the regular school.

Before taking up the medicinal treatment as practiced by our school, I will draw your attention to the form of pneumonia known as the hypostatic. The pulmonic inflammation is here usually preceded by passive congestion of some duration, super-induced by cardiac weakness or actual disease. It may occur, however, in any protracted disease, as in typhoid fever, arising in a measure from the dorsal position assumed by the patient for any length of time. The prognosis is always unfavorable. In a general way much depends upon rest on the part of the patient from the onset of attack, along with proper alimentation as a sustaining measure. Proper ventilation in the sick room must be insisted upon, a temperature of about 70 degrees being maintained constantly. Sufficient moisture in the atmosphere of the room is also essential to the comfort and improvement of the patient. Furnace-heated houses in northern cities are usually at fault both as to temperature and ventilation, and the atmosphere is often too dry in the rooms. The houses in this city, more suited to summer than winter weather, have decidedly the advantage in many respects for the safety of our cases. Moist poultices, used so frequently in former years, are now discountenanced as applications over the chest to preserve an equable warmth. An oil-silk jacket is still advised. Anti-phlogistin has earned a favorable opinion from physicians of both schools as a local agent to the chest. It is simple, cleanly and easy to apply. Hydrotherapy is applied in the way of using warm or tepid water, to sponge the body, when cleanliness and activity of the cutaneous surface is alone desired. When the temperature ranges high, and symptoms of toxæmia and cardiac paresis become prominent, the choice lies between cool or cold water as an external agent. It is not advisable to give a full body bath, nor is it safe to apply an ice pack over the lungs, posteriorly, even in the meningeal complication in which delirium and convulsions are apt to occur.

Caution must be exercised, especially in aged and feeble persons, in the sponging with cold water over the entire body. Lastly, it is sometimes beneficial to resort to blood-letting, in cases characterized by persistent delirium and when the right side of the heart is acting poorly. The drugs chiefly depended upon by our physicians in pneumonia, are few in number, comparatively speaking, but well proven and efficacious in action.

Veratrum Viride has practically supplanted *Aconite* in the stage of congestion and engorgement of a lobe, in lobar pneumonia. Its action extends into actual inflammation of the bronchioles and alveoli, while *Aconite* stops at the stage of engorgement. I have found the former remedy excellent in cases where the inflammation invades successive areas as in broncho-pneumonia. The latter remedy on the contrary, is more efficacious in the onset of broncho-pneumonia, ceasing to act beneficially when the disease is fully established. *Bryonia* continues to hold its place as a reliable remedy in the subacute stage of catarrhal pneumonia, and in pleuro-pneumonia. A dry and irritative cough, usually painful, with dyspnoea and pleuritic stitches are the most characteristic indications. It acts upon the fibrinous exudate in consolidation. The fever may run high, but the patient remains quiet in some cases, as movement usually causes an aggravation of the pains. The salts of quinia are considered indispensable, particularly by the olden school practitioners, especially in southern sections of the country, when decided malarial symptoms manifest themselves. As they possess antiseptic properties, the pathologists now recommend their use in toxaemic conditions. I have many times observed the speedy disappearance of pneumonic symptoms after the free administration of quinia sulphate in such cases. *Gelsemium* suits the influenza type of broncho-pneumonia, wherein the patient complains of great languor and muscular weakness, with much chilliness.

Ferrum Phos. is indicated in the stages of engorgement only, especially when the subjects are cachetic and debilitated. Early haemoptysis is a strong indication. It is beneficial during the stage or resolution, in anaemic persons.

Kali Iod. meets a form in which meningeal irritation occurs, delirium being a prominent symptom. In these cases the upper lobes of the lungs are involved. *Jaborandi* is a good second to *Kali Iod.*, but the lower lobes are affected instead.

Phosphorus is more applicable to atypical cases, occurring in delicate or feeble subjects. It is, therefore, indicated in "bilious pneumonia," "typhoid pneumonia," and the like. Its use is particularly during the stage of consolidation, but extends into that of resolution. Great exhaustion and depression, with much weight and oppression of the chest, are further indications. The tubercular process is often the underlying factor in these cases. Tartar Emetic is said to be indicated in asthenic cases, when the bronchial secretion is profuse, but patient cannot raise the expectoration, although the cough sounds loose. A condition of cyanosis usually exists, accompanied by great dyspnoea, cold surface, and clammy sweat. It is suited to the hypostatic variety, and when collateral oedema occurs. Carbo veg. is to be thought of in aged subjects, when the vital forces are at a low ebb. Sulphur and Arsenic may be mentioned as intercurrent remedies when special indications call for their administration. Sulphur is the remedy in delayed resolution, to bring about reaction. Arsenic is applicable when kidney and heart diseases complicate the cases. Mercury may be used advantageously when marked gastro-hepatic disturbances are present in cases. We will now turn our attention to the serious conditions of toxæmia and threatened cardiac failure, which so often precede a fatal determination. Here we are told to resort to the heart stimulants in particular, to tide the patient over the critical period. In aged and feeble subjects, we have excellent adjuvant remedies in alcohol and strychnine. We have touched upon the use of antiseptic remedies under the head of the quinia salts. It may be claimed, however, that our physicians resort to these quick-acting agents, in a tentative manner, that is, only occasionally, as they find that cases treated from the outset by properly selected drugs, according to the law or principle of cure in vogue by the Hahnemannian school, usually get along better or recover faster without their, at least, too free administration.

**THE NEED OF CO-OPERATION IN COLLECTING HOSPITAL STATISTICS
TO DEMONSTRATE THE SUPERIORITY OF THE HOMOEOPATHIC
METHOD OF PRACTICE.**

BY WALTER WESSELHOEFT, M. D., CHAIRMAN OF THE COMMITTEE OF HOSPITAL STATISTICS OF THE AMERICAN INSTITUTE OF HOMOEOPATHY.

THE committee of the American Institute charged with the elaboration of a plan to ensure and collect the most trustworthy statistics of the results obtained in our hospitals, hope to enlist the interest in their work of all physicians sincerely desirous of demonstrating the superiority of our method and the soundness of our theory. This work appears of such far-reaching importance, and is surrounded by difficulties so great, that well considered suggestions and co-operation from all quarters are earnestly desired.

Inasmuch as the difficulties to be met arise in so large a measure from the conflict among us of individual opinion and experience, the first question to present itself is no other than the fundamental one, What is homœopathic treatment? This point once agreed upon, the solution of the remaining problems will be comparatively easy, though it call for answers to questions as weighty as those touching the limitations of our method, the indications for the particular remedy in the individual case, the range of dosage to be first put to the test; the class of cases to be made the subject for observation; the aids and secondary therapeutic measures to be consistently admitted; the length of time for each series of observations, and many more of equal importance and complexity.

It will be seen at once, that the presentation of these questions will precipitate the controversy on every point on which the followers of Hahnemann have differed for close upon a century. But no candid man will deny that, with every year, the demand is growing more urgent and irresistible for a well directed and sustained effort to reach a position from which it will be possible to progress more rapidly than we have done during the last fifty years. Nor will it be denied that, with all the ability displayed in the maintenance of conflicting positions, and all the force of individual opinions, we are not in possession of such a body of clinical knowledge on which we can agree, as can be confidently taught in our schools or which can influence the profession at large. Despite our numerous

and important advances, and the powerful reforming influence exerted on medical thought and practice by our principles, our position at present is more nearly that of assertion than of proof; of divergent theories, and of experiences unverified save in the estimation of individuals or parties, rather than of teachable knowledge and the genuine effort to combine in harmonious research. To divert from this unfruitful field the means and energies now expended in unorganized labor to that of rigid experimentation surrounded by every rational safeguard against error, is the aim of the committee now seeking the adoption of measures calculated to evolve a degree of certitude in therapeutics beyond the reach of current clinical methods, whether within or without our hospitals or the limits of our school.

To reach an agreement as a basis for the evolution of this greater certitude, the first requisite is the cultivation of that scientific attitude of mind which, while it abandons no sound principle and disregards no valid experience, yet holds firmly in abeyance all preconceived notions, all unsupported individual opinion, and all purely theoretical assumptions. No lasting advancement in knowledge has ever arisen save out of this strictly objective mental attitude. The demand for accurate, self-sacrificing work and inquiry is in no sense to be looked upon as a challenge to any party or faction, but solely as a call for sober, patient and harmonious research as befits a scientific investigation, notwithstanding the fact that the final aim is the determination of the comparative merits of opposing views and methods. The obstacles to be primarily overcome, therefore, are not so much those inherent in the scientific problems, but rather those inhering in the imperfection of human nature. To escape from the evils of this imperfection, which are nowhere more apparent than in therapeutics, there is but one known course, the pursuit of the scientific method ruled by the scientific spirit which vaunteth not itself, is not puffed up, is patient and thinketh no evil, seeketh not its own, and rejoiceth in the truth.

For the work proposed two modes of procedure suggest themselves. Since in the main our school is divided into two parties who—unlike the old school, in which the agreement to differ is the only agreement—agree only in getting wide apart, either the Institute may select one large hospital of which the staff declares itself ready and willing to submit to rigid rules

of observation and record, or all our hospitals may rise to the occasion and pursue each its own chosen method, or, if preferred, two side by side under the same rules, and all under the control of an impartial body of supervisors charged with the frequent scrutiny of the work and the final summing up of the results.

The rules to be devised would be so framed as to insist on the most accurate diagnosis possible, allowing for obscure cases; in the clearest statement of the indications for treatment, general and special, more particularly of the indications for the drug and the dose, and for adjuvants, hygienic, dietetic, mechanical, palliative, hydro-therapeutic, in fact all measures other than purely homœopathic.

The cases to be observed might be all the medical ones presenting themselves, and such conditions occurring in surgical cases as are recognized as calling for medical treatment, or certain classes of acute and chronic affections might be selected for continued observation through a series of years. As the object would be to show forth in the fullest possible measure the results of homœopathic treatment, the records, which must be exhaustive, would have to note clearly and undeviatingly every departure from it. Since there is a deplorable lack of funds in all our institutions for the adequate support of officers appointed exclusively for more detailed and exacting work, this would necessarily throw upon every existing staff the burden of labors differing in many respects from those now so willingly carried on under the stress of limited time and means. It would seem advisable, therefore, to so restrict both observations and records as to ensure work of the highest character, having about it the least possible taint of routine and vagueness.

The committee feel that the time has arrived in the history of Homœopathy, indeed of therapeutics, for a great effort in the direction of unity of action in the testing of our experience, and in placing our principles on a more secure foundation than that of theory or individual opinion. Hence this appeal for support and earnest consideration of our status. Without the aid of many minds and a willingness on the part of hospital physicians to engage in the work, the committee are powerless. The confidence reposed in us by the public which so freely supports our hospitals; the crying need of our schools so largely sought by eager students looking for sound practical know-

ledge; the position we still occupy as a sectarian and misunderstood body, excluded in so large a degree from the scientific advantages of the profession, and last, but by no means least, the demands of science and humanity call for the initiation of a reform in our methods of clinical research, the responsibility for which we can no longer disregard. We are now called upon to realize that not material progress, not the gain of hospitals, schools and organizations constitute advancement in knowledge, or that their possession demonstrates superior therapeutic results, but that these show solely from the character of the work performed.

The objections to the proposal hitherto met are without weight. They come either from those who fear to disturb existing conditions, or from others who already feel themselves in possession of all attainable knowledge. They claim to have on their side common sense. But such common sense is neither wisdom nor science, and never helps a reform until the reform has helped itself.

SOME REMARKS ON RECENT SURGERY FOR CARCINOMA OF THE RECTUM.

BY H. OTTO SOMMER, M. D., WASHINGTON, D. C.

"THOUGH the mills of God grind slowly, yet they grind exceedingly small." We might modify this thought a little, and paraphrase its verbiage, and say though the work of the true Aesculapius is slow, yet it is exceedingly sure. To no work in medical science does this remark apply more than the slow, but sure war of the knife against malignant tumors. We belong to those who sincerely look forward to the day when the work of the great laboratories devoted to the research into the aetiology of malignant growths will have progressed so far that a revelation of the cause will render a rational curative therapy without the use of the knife an accomplished fact, but at present the sufferer from cancer has almost no one to thank for relief, be it no matter how temporary, except the surgeon. To him belongs the laurel crown for victory over agony, offensive discharges, tumor in its classical sense, hemorrhage, and death from other inevitable results of cancer.

The "X-Ray Quack" in his various cloaks of respectability,

and multifold titles for various developments of this branch of medical science, has bemuddled the mind of the laity, and filled his office with a trusting, deluded, but paying clientele, who are attracted by this "legitimized quackery"—an office of dazzling, wonderful, complicated machinery against which a code of ethics stands powerless, but which compares in its vicious influence only with the delusive splendor of a dazzling bar-room.

The Harvard Medical Commission, as part of a general report of conclusions on cancer says that "the remedies are either the knife or a serum." The practitioner knows that this resolves itself practically into "the knife." Some very radical advances have been recently made in attempted curative radical procedures for extirpation of *Carcinomata Recti*, but while the mills have ground surely as to progress in a general way, they have not always ground surely as regards the lessening of immediate lethal results, and while some of the Gods' mills have ground surely, those of some of the demi-gods of surgery have occasionally "missed a cog," if I may be allowed to take refuge in expressive vernacular.

We will not attempt to cover the literature of surgery of rectal cancer, as only fools rush in where angels fear to tread, but we do care to review somewhat in the interest of medical science, and truth, some of the literature and work from within the pale of our own school, notably that of Roberts, and others, with the pure motive of stimulating more work, and especially more work imitative of the great masters rather than personal innovations of very doubtful advance over the work of the "mills of the gods (not demi-gods) which grind surely."

If we wax acrimonious, which we will endeavor to avoid, or if we grow personal in using an occasional cognomen, it will be merely for the sake of scientific lucidity, and we seek the protection of our national society's codes sum total—for 'tis but a devil would cite Scripture for a purpose, as was done by the *North American's* report of the discussion of Roberts's paper a couple of years ago.

My watchword in this brief article therefore shall be an appeal to our code's motto: "The great end, and object of the physician's report should be the greatest good to the patient."

The laurels won by the deceased nestor—Helmuth—were not won by superficial experimentation, or melodramatic imitations of some of the brilliant dramas of surgery, for the dignity of the surgery of the Homœopathic school was based on its in-

tellectuality. The "dominant aggregation" had numerous good mechanics, and experimenters, but patients sought our surgeons to be treated as patients, and human beings, for cure where possible, if not cure then the most rational and safe palliation, and mild and gentle passage into the next world where possible—not by the most shocking coincidentals of ill advised surgical enthusiasm.

"Die milde Macht is gross," said Hahnemann, and while he is not our guide in surgical methods, he was the presiding genius of the spirit of our school, whose strong superiority over the allopathic has not been in an array of "scientific notorieties" in the guise of "homo in-sapiens," but in being the school of conservative wisdom, and thought, i. e., "doctors" in the lecture room, "physicians" in practice.

Fortunately the laurels won by the homœopathic school have been won by its homœopathy in its broadest sense, i. e., as the school of moderation in all things, and have not depended on the scholarship of some of its surgeons. Some work has cost too much effort to allow of its misconstruction, and suppression by clever pen twirlers, and medical society orators. The dignity of staid medical science is only too often insulted in our councils by cheap efforts at oratory, and our councils too often swayed by such, rather than by the plain expositions of frigid science.

We will confine ourselves chiefly to the Kraske operations for the removal of rectal neoplasms, by the abdomino-sacral route, and its relations to the Schwartz-Roberts method. We must presuppose on part of our readers a knowledge of the subject in general. To begin with we must first take Roberts' paper in the *North American Journal of Homœopathy*, August, 1902, "The Operative Treatment of Cancer of the Rectum," which has since appeared in pamphlet form. While we were indeed the only homœopath honored by mention in its text, we cannot permit these little flatteries to bias us in a scientific paper. Roberts has evidently aimed—except where affection for his own creation has biased his judgment—to be scholarly, but he weakened his argument by acknowledging Kraske as the greatest authority in this specialty, and later rather unfortunately indulged in a quibble with him, and attempted to add to the Kraske methods certain superficialembellishments which we have long since tried, and discarded as inessential, and even in direct conflict with good judgment, and the principles of sur-

gery and asepsis—we refer particularly to closing an abdomen into which infection has probably already been carried during the evulsion of the gut, even though the procedure were theoretically aseptic. Kraske and myself had *no peritonitis* fatalities, and from last report in our possession Roberts had, because he neglected the open-wound treatment in such cases and spoiled an otherwise clever operation by elegantly sealing in the germs with silver foil! The “silver plated patient” looked handsome externally, but the “germ kettle” boiled merrily inside, and the patient departed for celestial regions!

At the meeting of the Homœopathic Society of Washington, D. C., at which we were allowed the privilege of discussing the subject with Dr. Roberts, in place of Dr. Macdonald, who was otherwise engaged, Dr. Roberts was our guest, and also our senior, so that in propriety we let him have the last word, feeling sure that more extensive experience would prove the correctness of our contention, and so it has! In a society report of this meeting, that later appeared in the *North American*, Dr. Roberts was congratulated that his two cases lived, while Kraske's three cases died. This is either a wilful, or a careless misconstruction of the facts, and is calculated to falsify science by implying that we had fatalities from the errors in our methods, which is untrue. One of our cases died some time later from a BAD HEART; another was COMPLICATED by CANCER of the STOMACH, and LIVER, and was hence, from the practitioner's standpoint no longer operable anyhow, and was undertaken merely at the patient's desire to die under any critical experiment rather than live as he was. The third in that lot lived seven months, against Roberts' one year, in one case, and eight months in another; however, there is a decided difference in cases, and to pit a chance two against a chance three is not a scientific method of deduction in such matters, e. g. Roberts' had but two cases against our series of FIFTY-FIVE (not fifteen merely as given in Roberts' statistics) and we had duration cures until recurrence for *eight and one-half years*. Since we have opened the field of statistical discussion, which is of no value except when applied to lists of cases running in high figures, we may as well proceed.

We have referred to Roberts' misquotation of our statistics—fifteen instead of the actual fifty-five—so we must proceed in our elucidation. His statistics are totally erroneous, and misquoted, e. g. Yolkmann's best figure was completely omitted, it

being given as five years instead of actual six—a subtraction of one year, WHICH DIFFERENCE even is as long as Roberts' best figure. He has thoroughly misinterpreted Esmarch's figures, for he had not merely one case for each duration, i. e. 3, 4, 8, 11 years, but many more for each item of time.

Again Kraske's methods and statistics are comparatively new as compared with Czerny's, and have not been subject to as long a trial, but although Kraske is a much younger man than Czerny, his experience is not so far below Czerny as Roberts represents as, Kraske's: Czerny's=55: 99 in number of cases, but even at the time Roberts wrote there were much more comprehensive statistics available than Quenu and Hartmann's, of which Roberts should have been cognizant, namely those of Prof. König, Jr., of Berlin, in the *Therapie der Gegenwart*, May, 1900, as follows:

After a careful review of 881 cases, Krönlein has decided that an operation mortality of 19.4 per cent. exists, also that in 14.8 per cent. "healing" lasts three years, of which 13 per cent. get recurrence at later dates.

Of 39 patients 30 per cent. had complete control of their sphincters, whereas even 60 per cent. could keep firm feces in, and only ten had complete incontinence.

According to Krönlein the mortality of individual operators varies greatly, depending entirely on the inclination to "stake the limits" of operability high or low! In other words the PRACTICAL SURGEON SHOULD, especially in rectal cancer cases, know when not to operate!

Hochenegg, who operated 120 cases according to the Kraske-Hochenegg method, succeeded in getting his mortality down to 5.04 per cent.

In other words mere numerical statistics as to mortality, duration of cure, etc., are of absolutely no value per se, either as to an operator's ability as such, or as to the value of a certain method, unless we take into honest consideration the degree of pelvic lymphatic involvement, with reference to lymphatic extirpation, or recurrences dependent on lymphatic involvement, and especially the size of, and relations of the tumor itself, extent and character of adhesions, or even its direct extension into, and involvement of the sacrum, or ischium as part of the neoplasm.

Especially the condition of the patient as a whole, with refer-

ence to ANEMIA, etc., and consequent inability to stand loss of blood.

To elaborate a thought earlier expressed, a percentage of mortality reckoned upon three cases, *n. b.*, the first three ever attempted by so radical and daring an innovation as the abdomino-sacral, and its various trifling forms as the median laparotomy (in the sad delusion that it is something original, or essential)—is of no value at all, *e. g.*, a mortality of 66 2-3 per cent. out of three cases, and a survival of 33 per cent. means nothing at all, when one considers the poor results obtained at first by Billroth's and other resections of the stomach. If we add to our computations Kraske's work in 1893, already a period of two years before our association with him, and Sonnenburg's work of almost identical plan, in 1895, and their and our two successful cases since then we will rapidly reduce the mortality percentage.

We are quite sure that the Schwartz-Roberts method will lose nothing in its real value, or dignity, when its claims are adjusted to, and based on more elaborate and undistorted statistics, and its selection and application will be a matter of individual choice, and applicability to individual cases.

Suffice it to say that in the Kraske-Sommer method we claimed to ELIMINATE PERITONITIS by not hermetically sealing our abdomen, and by irrigating from above when necessary, and we succeeded WITHOUT PERITONITIS, where Roberts failed, because of his unnecessary elaboration, and "frills."

While Deaver, of Philadelphia, was writing from Vienna that the lymphatics dared not be removed, we were successfully extirpating them.

We claim to have led the way. To quibble about various modifications and improvements we have no time, and are too philosophic. In flat opposition to our esteemed confrere we object, (and I include Kraske in this) to the *indiscriminate* use of the Tillmann's-Kelly proctoscope in examinations for rectal cancer, owing to the danger of causing perforation, and as far as possible we advise digital diagnosis.

We fail to see why Roberts seeks refuge behind Kelsey, of N. Y., (a Rostock, Germany, postgraduate) as an advocate of colostomy, when we have such distinguished advocates of colostomy, for individual cases, as Allingham, in London; Quenu and Hartmann (authors of the greatest work on rectal surgery) in Paris, and as KRASKE is himself a warm advocate

of abandonment of rectal extirpation, and resections in certain cases, and substitution therefor of colostomy.

We cannot help but facetiously remark in closing that some recent exuberances recall to our minds the fable in Ovid, about Phaethon, son of Helios, and what happened to him when he tried to drive his father's chariot. For our own part we are content not to try to outshine the sunlight of the Masters, but live up to McBurney's wise counsel, rather try to learn "*to do the well established well*," than indulge in experimentations or iconoclasm.

SOME REMARKS CONCERNING AUSCULTATION IN CHILDREN.

BY C. SIGMUND RAUE, M. D., PHILADELPHIA.

(Read before the Tri-County Medical Society at Chester, Penna., March 21, 1905.)

Auscultation is perhaps the most valuable and most important single diagnostic method for the recognition of intrathoracic diseases; at the same time, when auscultatory findings are accepted alone and not studied in conjunction with the other methods at our command, they may not only leave us in doubt as to the condition confronting us but actually lead to erroneous conclusions. It will be the object of this paper not to dwell so much upon the subject of auscultation as an independent method of physical diagnosis and review the elementary principles of this art, but I shall endeavor to point out the place occupied by the same in the diagnosis of diseases of the heart and lungs in children and its relation to inspection, palpation and percussion.

I shall first speak of the examination of the lungs. We must remember that the normal breathing of the child is quite different from that of the adult in several respects, and failure to bear this in mind has led to many an error in diagnosis.

In the infant breathing is of the abdominal type and therefore the excursions of the chest are slight and breathing is feeble. Furthermore, it is decidedly irregular and instead of the soft breezy quality heard over the adult chest it is harsher and approaches more the broncho-vesicular type. Remember, breathing may be harsh in quality without being exaggerated—in fact the opposite is usually the case, especially in beginning tuberculous infiltration at the apex.

When the infant cries and its breathing becomes abnormally deep it almost approaches the bronchial quality heard in pneumonia, but this of course is only transitory and is due to the thinness of the chest wall and the immature character of the air-cells, while the bronchi are relatively large. For these reasons the respiratory sounds produced in the trachea are well transmitted to the examining ear.

In older children, as the respirations become more vigorous and the lungs better developed, the breathing becomes rude and exaggerated, in other words, we now encounter that type of breathing designated "puerile," which is normal in childhood and sometimes is simulated in abnormal states in the adult.

The breathing heard over the upper part of the chest in front on the right side is in some instances distinctly tubular, even approaching an amphoric quality during deep respirations. The anatomical reason for this is the relatively large size of the right bronchus and its somewhat higher position than the left bronchus. We must be cautious, therefore, in making a diagnosis of consolidation of the lung or cavity in this region, and never make it on the findings of auscultation alone. Posteriorly, between the scapulæ, we are also able in children with thin chest walls, during deep breathing, to hear the air flowing in and out through the trachea and the primary large bronchi. This bronchial element in the respiration can be traced upward and outward for some distance along the right supra-spinous fossa.

Occasionally during deep respirations, especially with crying, subcrepitant râles may be heard at the apices (supra-clavicular region) and at the bases posteriorly. They may be designated "latent râles" and are not pathological.

Instead of taking up seriatim the various diseases of the lungs and their audible signs I have felt that it might be of more practical importance, and certainly more novel if I carried out the idea of showing you just where we are most likely to make our mistakes in diagnosis. There is nothing more impressive than to have made a grand mistake, and the next time we usually know better. Mistakes are therefore necessary to round out our education as diagnosticians.

Let us now consider one by one the conditions that are most likely to lead us into error. In the first place, the normal disparities must always be kept in mind in auscultating the child's

chest. When, however, the lung becomes infiltrated in the neighborhood where broncho-vesicular, or mixed breathing can be elicited normally it becomes a difficult task to decide whether we are dealing with normal or pathological breathing. But if we remember that normal bronchovesicular breathing follows along the course of the primary bronchi and consequently grows more intense as we approach the trachea, while pathological breathing bears no definite relation to the bronchi and in fact may even grow more intense in a direction away from them, then the question can often be decided with ease. Again, the association of impaired percussion resonance, râles and fever will clear up the mystery.

Bronchial breathing is sometimes diagnosed where it does not exist. We may be deceived if we are auscultating a child that is crying or breathing abnormally rapidly. Again, in pneumonia we may hear transmitted bronchial breathing along the spine on the opposite side of the chest, but here there will be no percussion alterations. But the most vital error—and the one I believe most frequently made—is to mistake a pleural effusion for a pneumonic consolidation because we happen to hear bronchial breathing and broncophony over a considerable area of the chest instead of an absence of breath sounds as we expect to get in these cases. The child's chest is such an excellent transmitter of the sounds that arise within it that we must not be surprised to hear them any where we may choose to place our ear. This, of course, is an exaggeration, but we should always be suspicious of fluid if we hear bronchial breathing over an entire side of the chest posteriorly, especially if such signs develop consequent to an attack of pneumonia and are persistent. Here again auscultation is dependent upon palpation and percussion for a differentiation between consolidation and effusion. And even then we must take into consideration the past history of the case; mode of onset; the character of the fever and the state of nutrition before we can make a diagnosis of the true nature of the pathologic condition, for while physical signs tell us the physical conditions present in a case, they cannot reveal to us their true nature.

Pneumonic consolidation, on the other hand, may give us an area of silence. A paroxysm of coughing may remove the plug of secretion that has caused this absence of breath sounds and the silence will then be replaced by bronchial breathing. It

may not be until a subsequent examination that this will occur. Pulmonary atelectasis will also give us such an area but this is much rarer.

Râles are often misleading. First of all, noises produced in the nose and in the throat can be plainly heard all over the chest in young children. They are coarse and rasping in character, and have no definite location. I think we are most likely to be deceived by these râles if we examine with a binaural stethoscope, for then both ears are plugged up and we are not aware of the fact that we can hear these sounds as well away from the chest as over the same. If, however, we listen to the whole child, as it were, and not confine our examination to small areas of the chest, we will escape this fallacy. Instruments of precision have their uses, but we must not allow ourselves to become slaves to them.

The fine subcrepitant r  le heard in bronchopneumonia is so well conducted through the child's chest that it sometimes assumes a harsh quality identical with pleural friction sounds. The best diagnosticians have been deceived by this sign and it is by no means easy to distinguish between a pulmonary r  le and a pleuritic rub in many instances. Here the concomitant signs again must be taken into consideration.

And now a few remarks concerning the examination of the heart. A source of error here is to believe that we have an accentuated pulmonary second sound when in reality this sound is normally accentuated in childhood. The relatively large size of the aorta and the low tension in the systemic circulation at this time of life accounts for the difference between the aortic and pulmonary second sound. Again, functional murmurs at the base, to the left of the sternum are not uncommon. This is the area of "auscultatory romance" and we should always look upon it as such unless we have at the same time alterations in the size of the heart, general nutritional changes and interferences in the circulation, to confirm the existence of a congenital heart affection. For the purpose of accurately registering the difference in the intensity of the heart sounds and for determining the point of maximum intensity of a murmur, the stethomanometer of Oertel is a valuable instrument, but the well-trained ear is quite sufficient for all clinical purposes.

Apical murmurs are also commonly heard in childhood, and especially in the acute infectious diseases. That they are not always due to endocarditis has been repeatedly confirmed at

autopsy. Endocarditis is especially unlikely to exist when these murmurs are present in the early days of such an illness. They are probably myocardial in origin and when they persist there occurs in addition an increase in the area of cardiac dullness and an accentuated pulmonary second sound. The disappearance of these signs with the recovery from the primary disease speaks against endocarditis in which the murmur persists for a much longer time or becomes permanent. I am of the opinion that we make too many diagnoses of endocarditis.

Exocardial murmurs sometimes lead to an erroneous diagnosis. The child's heart is particularly excitable and when nervously or otherwise overactive will produce a systolic cardio-pulmonary murmur in the apex region by driving the air out of the air cells of the overlying edges of lung tissue. Deep inspiration increases these murmurs while holding the breath diminishes or abolishes them. They are also absent when the heart's action is tranquil.

Much more could be said of auscultation. The discovery of the alterations in the sounds in the chest as a result of disease and the application of this discovery to clinical medicine was indeed a great triumph and places Laennec among the immortals in medicine. It remains for us, however, to use it rightly, to learn its powers when properly applied, and to avoid its pitfalls, if narrowly and inaccurately employed.

NOTE ON NOCTURNAL POLYURIA.

CLIFFORD MITCHELL, M. D., PROFESSOR OF RENAL DISEASES IN
HAHNEMANN MEDICAL COLLEGE AND HOSPITAL, CHICAGO.

Many years ago Dr. Oliver, of England, in his little book on the urine drew our attention to the fact that in chronic nephritis there was often an excess of the night urine over the day.

I made a study of this condition for a number of years and in 1898 published an account of a large number of cases of all sorts in which I found this excess of night urine. It turned out that three out of four of these cases were of chronic nephritis. In my book on "Urinary Analysis," published in 1902, I have called attention again to this point in diagnosis.

Nevertheless the point seems to have escaped the eye of those who write books on the practice of medicine, although my claim

has been verified independently by several other observers. Finally, Cabot, of Boston, says in his recent paper (*Journal of the American Medical Association*, March 25, 1905) "the increase in the relative amount of night urine—nocturnal polyuria—is in my experience one of the most reliable manifestations of a chronic nephritis, especially in its earlier and middle stages."

I have shown, however, in an article published in the *HAHNEMANNIAN* some years ago (*January*, 1902) that nocturnal polyuria is common in the case of women suffering from chronic constipation and fecal impaction. In a paper read December 9th, 1904, before the Homœopathic Medical Society of the district of Columbia, I reiterated the statement and gave full details of a case. This paper has been published in the *North American Journal of Homœopathy* in series during the early months of 1905.

Such observations show, it seems to me, the value of the collection of the whole twenty-four hours' urine in divided portions. Cabot lays stress on the importance of studying the physical characteristics of urine, which he places first in diagnostic value. It is possible that in our desire to make elaborate analysis of the urine, we may overlook useful information to be derived from simple methods of study.

THE REATTACHMENT OF A DETACHMENT OF THE RETINA.—In a patient, 17 years of age, who suffered with chronic nephritis and retinitis albuminurica, the author observed the reattachment, within two months, of an extensive ablatio retinal, after 21 litres of edema fluid had been drained off. The reattached retina resumed, in part, its function, although there had been complete blindness.

The anatomic examination showed that large areas had reattached themselves by a simple disappearance of the sub-retinal exudate, and that the rods and cones were in fairly good condition. Secondly, the replacement of the retina was caused over a considerable area by a thin layer of organized exudate. Here thin connective tissue strands caused the connection between retina and choroid, or else circumscribed proliferations, which corresponded to the white bands or clump-like bodies seen with the ophthalmoscope. The pigment layer remained attached to the choroid throughout the entire area of detachment. Neither rupture of the retina nor shrinking of the vitreous were visible.—W. Uhthoff, Breasleau. *Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

EDITORIAL.

THE PROPOSED AMENDMENTS TO THE INSTITUTE BY-LAWS.

SEVERAL amendments to the Institute by-laws have been proposed. Some of these are of more than ordinary importance and upon them we desire to make a few comments.

There has always been more or less dissatisfaction concerning the methods adopted in the election of officers of the Institute. Whatever plan hitherto suggested has always been found open to serious criticism. The main objection made to the present system depends upon the fact that it favors politics, and yet during the past four years it has given us such excellent presidents as J. C. Wood, J. P. Cobb, J. P. Sutherland, and Geo. Royal. Unfortunately, however, the system has led to the laying of political plans far in advance of the time of the meeting, and attention has been concentrated on the pivotal offices of President and General Secretary. The offices of vice-president, censors, and others, which should be chosen with great care, oftentimes being filled in hap-hazard fashion. We do not mean to infer that the incumbents elected to these posts of honor are not worthy, but we wish to indicate that as a rule, nominations are made in much the same spirit as in the case of the vice-presidency of the United States, election to which is regarded as tantamount to a political burial.

Dr. J. H. McClelland gave notice at the Niagara Falls meeting that he should propose to amend Art. IX., Sec. 8, of the by-laws as follows:

"That nominations shall be by informal ballot at 10 o'clock on the second day of the sessions of the Institute, whereupon the election of officers shall proceed."

Of Dr. McClelland's amendment, we may say that it is worthy of trial. It is open to the objection that it will prove to be time consuming, but if it gives results, the time will not be wasted. It will undoubtedly lessen the chances of suc-

cess of organized political work by introducing numerous unknown factors—called “dark horses” by the politicians,—and give the membership at large opportunities for expressing a choice. It certainly will kill the Institute’s servitude to “cliques of ten.”

Dr. Franklin Smith gave notice of a change of Sec. 4, Art. V., by adding after the word “shall,” the words “be liable to,” so that the clause shall read “shall be liable to have their names dropped from the roll of membership.” The paragraph in question refers to members who do not pay their annual dues. It is a good business maxim that people who do not pay their debts are not worth having about. The present by-law is mandatory; the proposed amendment is permissive. The present by-law permits reinstatement at any time through the Board of Censors when the derelict member pays all arrearages. We cannot see that the present by-law is capable of working an injustice. Dr. Smith’s proposed amendment will be liable to make trouble if any discrimination is exercised, dropping some members and continuing others.

Dr. Bailey’s proposed amendment to make the Secretary’s salary a matter for the annual consideration of the Institute instead of being fixed by law, is an amendment that will bring untold trouble. Each year some one will probably come forward to propose a change in the direction of economy or extravagance. The present salary has been fixed by law for many years. It is not excessive, nor does it really pay for the time required in the performance of the duties of the office. But no incumbent of the office has ever complained; and the Institute is not rich.

At present a change can be made only by due notice of one year, and a vote of two-thirds of the members present at the meeting acting upon the question. Should Dr. Bailey’s motion prevail, fifteen or twenty men can get together at some unusual hour, say the closing hours of the session, and play hobs with the Secretary’s salary, or make him a present of the entire treasury, as their sweet wills suggest. It is not unlikely also that there will be annual “log-rolling” and “wire pulling” as to the Secretary’s salary.

This brings to mind the closing session. Last year it occupied but fifteen minutes of the sixth day, Saturday, June 25, 1904, 9.30 A. M. to 9.45 A. M. How many were present we do not know; but we can surmise that some remained over to

attend this session merely to prevent the enactment of vicious or snap legislation.

The proposed amendment which shall provide for the publication of a journal is to our mind worded very loosely, namely, "that the transactions shall be published in such form, and at such time or times and under such business instructions as the Institute may direct." This proposition may lead to any plan; it is liable to frequent changes. It may mean that the Institute publish a journal, but if it does, it indicates that such journal must limit itself to the publication of the transactions. It may mean that the Institute shall deal its transactions out to numerous journals, or limit their publication to one journal. The proposed amendment should be definite as to intent. We certainly do not believe that the Institute should stop the publication of an annual volume unless all of its transactions are published in one journal. It certainly will never do for the Institute to sell publication privileges even to the highest bidder, for the Institute as a body cannot afford to be compromised by the editorial opinions or the business energy or enterprise of the management of the "official organ." The amendment should provide for an Institute journal for a definite term of years, or it should be downed.

We have already expressed our views in part as to the proposed journal. As an abstract proposition, we believe the publication of the journal is a good thing. It is in the line of modern enterprise. The American and British Medical Associations publish journals of which they may well be proud. The California and Pennsylvania State Societies (old school) also publish journals which thus far have maintained a high ethical standard.

We stand in fear that members will not be willing to make haste slowly. Expectations of large sales and equally large profits can materialize only after several years. We fear that in the carrying out of what will prove a good thing, the enterprise may come to naught or worse. Certainly, with an income of \$7,000 to begin with and economical management, with the Secretary as editor, we can get along from a financial standpoint. But it will be close sailing. It is very doubtful if large and profitable advertising contracts will come in until the journal has established itself. Then, too, it must be remembered that the advertisements accepted should in the case of an association journal be selective in their character. With

good management, and enterprise, the journal should become popular. In no event can such journal become operative this coming year, for the Institute is not an incorporated body. This being the case, any individual member becomes liable for any damages resulting from the publication of a libel by either contributors or advertisers. At least that is the law in Pennsylvania. As we said before, we believe the journal is in the line of advance. We do not believe it will lessen the patronage of a single journal. At one time, we did think that those of purely local circulation must die from the competition. But such journals exist for a definite purpose with which the Institute's journal will not come in conflict. If the Institute decides for a journal, it must make the organization of that journal a permanent one. It must back the editor and the business manager. There must not be constant rebellions against authorities *a la* Spanish American republics.

THE TREATMENT OF CANCER.

IN his Bradshaw lecture, delivered before the Royal College of Surgeons of England in December last, Dr. Mayo Robson gave a thorough and critical summary of the results of the modern treatment of cancer. The conclusions which have been reached by this eminent authority after a wide experience in dealing with cancer must be thoughtfully and seriously considered.

The multiplicity of "cures" which have been proposed during the last decade for this dread disease has done much to confuse practitioners of medicine and to make them undecided as to the method of treatment to advise in patients suffering from malignant growths. The treatment of cancer by electricity, X-rays, radium, serums, etc., all have ardent advocates for the time being at least. These measures appeal strongly to the patient and to the physician also, for the reason that they cause but little discomfort as a rule and do not necessitate the use of a general anæsthetic or prolonged stay in a hospital. It is to be regretted, however, that the too hasty and enthusiastic recommendation of newly discovered methods of treatment has led among physicians and the laity, to a fatalistic tendency to delay and the senseless running after false gods. Referring to this phase of the subject, Dr. Robson says: "The

methods of treatment, psychical, physical, medicinal, photo-therapeutic, electrical, etc., are almost too many to mention, certainly too many to describe in a limited time; but it ought to be made known that one and all have been found wanting except in rodent ulcer, and so far as our present knowledge is concerned, in the early diagnosis and immediate, complete and wide removal lies the only hope of cure in malignant disease."

Before entering upon a critical study of the results of the operative treatment of cancer, let us consider some general features of this disease.

The true cause of cancer is a veritable mystery. Many pathologists contend that malignant disease is due to an alteration of the somatic into generative elements. Even if this view be accepted, the primary cause of this alteration remains unexplained. On the other hand, the parasitic origin of cancer has many advocates, and while a specific organism has not been demonstrated, observed facts are not incompatible with the theory that cancer may be produced by an intracellular parasite which stimulates the cells to excessive multiplication.

Even regarding the predisposing causes of cancer there is much in doubt. Some physicians trace it to an excess of meat, others to an excess of sugars and starches. Uric acid, alcohol, tobacco, pork, salad and even table salt have all been heralded as *the* predisposing cause of cancer. As the disease occurs among all races and conditions of men, and indeed among all the vertebrate animals, we must conclude that food, soil, climate and methods of life have no demonstrable influence in causing malignant disease. The only factor which we can positively assert has a direct influence in exciting malignant growths is irritation in various forms. This has an important bearing on the preventive treatment of cancer and will be discussed later.

Another fact which has been observed clinically, and which has been repeatedly confirmed by animal experiments, is that cancer is at first a purely local disease and only later does it become a constitutional malady. The weight which this fact must have in influencing our opinion as to the curability and method of treatment of cancer can hardly be overestimated.

The operative treatment of cancer may be divided into three varieties: the preventive, curative and palliative operations.

Preventive treatment consists in the arrest or removal of

known causes and the abolition of discoverable pre-cancerous conditions. Robson believes that all malignant growths have a pre-cancerous stage. Many of these such as papillomatous masses on the lips or Paget's disease of the nipple are easily recognized, while those situated in the internal organs, such as chronic ulcer of the stomach or ulcerations of the gall-bladder as the result of gall-stones, are often difficult to discover. We believe that in the past, clinicians and surgeons have not laid as much emphasis upon the recognition and treatment of these pre-cancerous conditions as their importance warrants. It is a well known fact that malignant growths of the skin are almost always preceded by warts, ulcers, fissures, tumors or some other pathological lesion. A large percentage of mammary cancers occur in breasts that have previously been the seat of abscesses, chronic inflammatory swellings or chronic eczema. Numerous examples of pre-cancerous conditions are to be found in the female generative organs. Notable among these are lacerations and ulcerations of the cervix, uterine adenomata and cysts of the ovaries. Other examples of pre-cancerous conditions in various organs of the body could easily be cited, but those above mentioned are sufficient to illustrate their frequency.

The results of operative treatment during this pre-cancerous or incipient stage are very satisfactory. We believe that Robson is justified in his statement that "a general acceptance of the view that cancer has usually a pre-cancerous stage and that this stage is the one in which operation ought to be performed, would be the means of saving many useful lives for it would lead to the removal of all epithelial conditions before the onset of cancer." In the light of our present knowledge it is the duty of physicians to regard with suspicion lesions on epithelial surfaces which are resistant to treatment and removal should be advised on the least tendency of induration or to spread. Certainly we are not justified in waiting for the development of glandular enlargements, of anemia, emaciation, fever, and other constitutional signs of malignant disease before resorting to operative treatment.

In considering the curative value of operative measures in the treatment of cancer it is not sufficient to estimate the number of patients who survive the operation, but we must know the condition of these patients several years later. It must be borne in mind also that it is unfair to surgery to take the av-

erage results of all operators, but we should judge what *can* be done by the statistics of skilled operators who have devoted special study to this work. The success of the operative treatment of cancer depends upon the early and complete removal of the growth together with a wide margin of healthy tissue, and if possible of the adjacent lymphatic glands. Since these principles have been carried out in the treatment of malignant growths the percentage of good results has been much improved.

The statistics of a large number of mammary cancers operated upon by several expert surgeons show that fifty per cent. of the patients may look for a three years' respite, forty per cent. a much longer period, and in many there is a complete cure. The results of early operation for cancer of the uterus are quite encouraging. Olshausen, in a series of eight hundred and eight cases, reports thirty-eight per cent. had no recurrence after five years. Zweifel, of Liepsich, operated on one hundred and fifty-three cases of uterine cancer and had thirty-five per cent. well and free from recurrence after five years. These results show that the views of the laity and of many of the profession regarding this condition are more pessimistic than the facts justify, and that cancer of the uterus is a local and curable disease if diagnosed and removed in its early stages.

Palliative operations are adapted to advanced cases and frequently do much to add to the comfort of patients and to prolong life. Among the most successful of these have been gastrostomy for cancer of the œsophagus and colostomy for cancer of the rectum.

All observers are agreed that no specific cure for cancer has yet been discovered, and we can hardly expect such a discovery until the cause of malignant disease has been demonstrated. Radium, X-rays, electric needles and other physical methods of treatment are limited in their range of usefulness almost entirely to superficial growths on the skin or mucous membranes. Coley's fluid is adapted only to sarcoma and even here is uncertain in its results, these being at times brilliant and at times disappointing. Operative treatment therefore remains the most widely applicable and most effective method of dealing with cancer now at our command, and physicians should lose no time in consulting the opinion of skilled surgeons in all suspicious cases at the earliest possible moment.

LIBERALISM IN MEDICINE.

THE appointment of our esteemed contemporary, Dr. Eugene H. Porter, editor of the *North American Journal of Homœopathy*, to the position of Commissioner of Health of New York State, is not only a compliment to Dr. Porter's ability, but to the homœopathic school as well. It is not often that homœopathic physicians are honored with positions of so much public importance, and we are glad that Dr. Porter now has the opportunity to demonstrate that a homœopathic physician can work as intelligently and effectually for the prevention of disease and the improvement of public health as practitioners of any other school of medicine.

As a sign of the times it is interesting to note the attitude of the dominant school of medicine toward Dr. Porter. The *Medical News* commenting editorially on Dr. Porter's appointment says: "The efficiency of a State Commissioner of Health is indeed very largely a personal matter, and depends on how seriously the occupant of the position takes his duties. There can be no doubt that he (Dr. Porter) will receive all due co-operation from the members of the regular school of medicine in this work, and that in the high purpose of maintaining and ameliorating the health of our people, there shall be no petty jealousy, to interfere with co-ordination in effort. There is at the present time very little difference between the education given the medical students in homœopathic colleges as compared with those of the regular school, the difference, indeed, being almost absolutely confined to the department of pharmaceuticals. With regard to sanitary science and public hygiene, the opportunities afforded by both schools are practically the same, and in these subjects the State examination required for licensure consists of the same set of questions. There seems to be no doubt, then, that the health of the State will be quite as efficiently cared for as it has in the past, and that there shall be no necessary cause for complaint because of any difference of principles with regard to the prophylaxis of disease."

"With regard to differences between schools of medicine, it seems only proper to recall what Governor Pennypacker, of Pennsylvania, said recently in vetoing the osteopath bill, which had passed both houses of the legislature and came up for his signature. He calls the bill an anomaly in our legislation be-

cause it would legalize the limitation of the use of any method of treatment for the cure of disease. The whole idea of different schools of medicine, he says, is unscientific, and everyone engaged in the treatment of the sick should seek the truth wherever it may be found and utilize it. This opinion represents the ideas of all thinking men at the present moment, and there is no room left now for differences of opinion that may keep those who are suffering from any form of treatment which could possibly be of benefit to them."

While we have no doubt that there are many adherents of the dominant school of medicine who will not be as fair-minded as the writer of the editorial above quoted, and who will give vent to their dislike of homœopathy by personal attacks on Dr. Porter, nevertheless coming as the above sentiments do from a reputable and representative old school journal, we must regard them as evidence of a growing spirit of liberality and fairness toward homœopathic physicians.

In the past there has been a constant effort on the part of many of the members of both homœopathic and allopathic schools to ridicule and disprove the theories and practices of their opponents, rather than to seek after that which is of practical value in the treatment of the sick in both methods of practice. Physicians of every school need to be reminded of the words of Hahnemann: "The physician's highest and only calling is to restore health to the sick." As scientists or philosophers we may take time to discuss pathological hypotheses and to argue therapeutic theories, but as practical physicians it should be our chief end and aim to seek after effective methods of ameliorating suffering and of restoring the sick to health. Viewing the physician's duty to his patients from this standpoint we heartily agree with the views of the editor of the *Medical News* that "The sooner there is a universal consensus of opinion that any form of treatment which promises to do good will be welcomed by all practitioners of medicine, without regard to the method of their education, the sooner will real progress in the cure of disease become effective."

GLEANINGS.

RELATION OF CHOLIN TO EPILEPSY.—J. Donath believes that both irritation and increased irritability of the cortex are essential to an epileptic attack. It has been discovered that the perspiration and blood of epileptics are poisonous, while the urine is not so. The cerebrospinal fluid is innocuous in intermediary periods, but will set up intense general convulsions if withdrawn during the attack. For this, cholin is chiefly responsible. This results from the decomposition of lecithin, set free as the medullary sheath disintegrates. The writer gives at length his investigations of the fluid and of animal experiments made with cholin. Lumber puncture was made in 80 patients. In 18 cases of genuine epilepsy, cholin was found in 15 times, in 3 of Jacksonian epilepsy 3 times, one in 3 cases of dementia paralytica, once in 2 cases of taboparalysis, 10 times in 15 cases of tabes dorsalis, once in 3 cases of neurasthenia, once in 3 cases of hysterioepilepsy. It was also found in one case of syphilitic epilepsy, in 3 cases of lues cerebri, 2 of cerebral tumor, 2 of cerebral abscess, 1 of compression myelitis, 1 of polyneuritis alcholica, 1 of encephalomalacia, 1 of chronic hydrocephalus, 1 of spina bifida, none in 2 cases of hysteria. The amount is probably proportioned to the degree of nerve disintegration. Though ammonia is fairly constant, it is hardly probable it induces the attack. Cholin differs from neurin only in the elements of one molecule of water. It does not appear in the urine, and seems to be burnt up completely in the system. Injections of cholin or neurin into the cortex or under the dura, cause severe tonic and clonic convulsions, often leading to paresis, general tremor, difficult respiration, frequently frothing of the mouth, lacrimation, increased intestinal secretion and peristalsis.—*Medical News*, January 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

IRREGULAR FEATURES OF LOBAR PNEUMONIA.—C. K. Law finds empyema more frequent in childhood and early life, although he has seen it once in a man of 50. If germs find their way to an already inflamed cavity they change a plastic or serofibrinous pleurisy to a purulent one. This accounts for the more prolonged pain in the side in the pneumonia preceding empyema, the continuance or return of temperature after the crisis, the change from dullness to flatness when the bronchial breathing and subcrepitant rale subside and vascular breathing does not take their place at the lower portion of the lung. Under these conditions we should at once aspirate. Central pneumonia or that the late localization often leads to error in diagnosis. Some have passed the crisis before slight pleuritic

sounds have established it. In migratory pneumonia there may be a crisis for each lobe indicated by a drop in temperature and improved pulse. Tympanites is as much to be dreaded as in typhoid, a condition often aggravated by opium and too much milk. The disastrous results are both toxic and mechanical. The writer accounts for initial abdominal pain by involvement of abdominal branches of the nerves supplying the thorax. Usually a thorough chest examination will reveal the true state of affairs, for central pneumonia will rarely give rise to such pain.—*Medical News*, January 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

EXCISION OF THE SUPERIOR CERVICAL GANGLION OF THE SYMPATHETIC FOR SIMPLE GLAUCOMA.—Colman W. Cutler says two questions should be answered before this becomes a definite operative procedure. 1. Is the eye ever injured or the glaucoma aggravated by the operation? 2. Does sympathectomy offer a prospect of sufficiently prolonged relief to justify us in urging it in these desperate cases, either before or in place of iridectomy? One case, the history of which has covered a considerable period, is again referred to, having been previously reported. In 1893 glaucoma first appeared in a male patient. Various forms of treatment were resorted to; finally in June, 1901, sympathectomy was done. Following this, vision had improved, and in April, 1904, it was practically as good as it was soon after the operation. He had enjoyed useful vision, had worked and suffered no return of the symptoms for a period of three years. Examination, however, made in October, 1904, showed that vision had perceptibly failed. Other operations are reported by Cutler. In three recent cases of simple glaucoma the results of the operation have not been positive, *i. e.*, vision has not been improved, but the disease has not progressed, and the eye has not suffered. The risk of the operation is trifling in competent hands, and the danger to the eye is practically negligible. The author hopes the operation will not be allowed to fall into disuse because of fancied difficulties to patient and physician.—*Medical News*, January 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE FUNCTION OF THE RENAL CAPSULE—*Levin*.—The recent therapeutic application of decapsulation of the kidney with beneficial results in cases of colicky pains, hematuria, and albuminuria, and the still more recent cures of simple Bright's disease, reported by the use of this simple surgical procedure, render this subject particularly interesting. The fibrous coverings of the liver, spleen, pancreas and all other parenchymatous organs, when compared with that of the kidneys, show the following marked difference, namely, that while the former are very thin and rightly adherent, forming an integral part of the organ the latter is a strong fibrous covering, easily detached from the organ. The author assumes, *a priori* that the capsule of the kidney is functionally more important than the capsules of the other organs. By means of the enometric method of investigation, which records the minutest changes in the size of the kidney, the author sought to discover the influence of the capsule on the kidney. He used two different agents with which to bring about the shrinkage of the kidney, adrenalin, which

actively contracts the blood-vessels of the kidney simultaneously with the rise of the general blood pressure, and stimulation of the vagus nerve, which causes a weakening of the heart action and the consequent fall in blood pressure. Twenty-four or forty-eight hours after decapsulation of a dog's kidney, the author clasped it in the encometer and after taking the normal tracing, either injected adrenalin or stimulated the vagus. On comparing the resulting tracing with that obtained from the non-capsulated kidney, he finds that in the latter, immediately after the injection or stimulation, the tracing falls, then continues for some time on the same level, but always shows pulsation and returns to the old level, mostly even before the tracing of the carotid becomes normal. In the decapsulated kidney the tracing falls almost immediately after the injection, then for a considerable length of time continues as a straight line, showing an absolute cessation of pulsation in the kidney, and returns to the normal much later than the carotid blood pressure. From these results the author draws the following conclusion: Any stimulus, which either by contracting the general blood pressure or weakening the action of the heart, diminishes the size of the kidney, exerts a much stronger influence on the decapsulated kidney than on the normal one, and this influence also lasts longer on the former. The capsule acts like an elastic covering. On the one hand it prevents an undue overfilling of the kidney with blood on the other hand it does not allow the kidney to remain contracted and bloodless for a long time.—*The American Journal of Physiology*, November, 1901.

WILLIAM F. BAKER, A. M., M. D.

TACHYCARDIA AND INJURIES.—U. F. Martin terminates an extended exposition of the literature of tachycardia by the report of a case of his own. The patient was caught by his coat in a rapidly revolving wheel and whirled about till the throwing out of a cog stopped the machinery. He was deeply asphyxiated when cut down, though he had not lost consciousness, both feet were crushed and several ribs were fractured. Amputation of both legs was necessary, and during the operation the pulse varied from 144 to 175. He was delirious for over a week, during which his pulse remained at 150. In the course of the next four weeks it gradually dropped to 112-120, but rose again to 150 after a secondary operation on the flaps, and still 113 on discharge over seven weeks after the injury. During his stay in the hospital no murmurs or abnormal signs other than the rapidity and a slightly accentuated second sound could be detected about the heart. The author places the case under the head of pure cardiac neuroses following injury to the neck and chest.—*Medical Review*, December 3, 1901.

WILLIAM F. BAKER, A. M., M. D.

THE SCOPE OF SO-CALLED EXPERT TESTIMONY.—Gohen says that the difficulties attending evidence upon pharmacologic and other questions could be in a large part obviated. (1) By adopting the principle of controlled examination with preservation of portions of materials examined and exhibition of the results. (2) By submitting scientific questions to the judgment of a jury or commission of experts who should report to the court and whose unanimous report or discrepant reports should be submitted to the trial

jury as part of the evidence of the case. Before such a commission scientific experts might be allowed to appear frankly as advocates arguing upon the evidence submitted but not on opinions, it being the function of the commission to formulate opinions for the guidance of the court and jury having final decisions on the case. As a plan suggested in the foregoing paragraph, is not likely to be adopted for many years, if ever, the duty devolves upon physicians called for expert witnesses to guard their own action and evidence so that the report of partisanship which now justly or unjustly attaches to the testimonial experts may be removed from the honest and competent majority and a sharp line of distinction be made between them and others. The chief difficulties that honest expert witnesses have to meet with are: (a) The necessity to state technical matters in untechnical terms; (b) the combination of witness and advocate in one person; (c) the confusion of judgments of the result of scientific research, analysis, with opinions and like confusion concerning statement of facts of general scientific knowledge. Physicians and other experts should specify that they are to tell the whole truth and to answer frankly and fully the questions of counsel on the other side and that they are not to be asked to lend themselves to any attempt at terrorizing; that their opinions are to be held subject to modification by any new facts that may be brought out in the court, and lastly, that they are not to become advocates on or off of the witness stand.

He believes and expresses his belief in the following words: "That the expert has an honorable and useful field of work as an assistant and advocate to the counsel and his place should not be on the witness stand, but at the side of the counsel advising him as necessary.—*New York Medical Jour.*, Jan. 15th, 1905.

WILLIAM F. BAKER, A. M., M. D.

MYOIDEMA—*Shively*.—A careful clinical study of this subject has been made by the writer and special reference has been made to its occurrence in consumption of the lung. This pulmonary muscular contraction very usually present in lung disease may be brought out by a sharp tap with the forefinger. The contraction occurs in the group of fibers near the point of impact and appears as a well-defined hard ridge, tetanic in character and raised in a direction at right angles to the course of muscular fibers. This whipcord-like elevation continues for a few seconds and then goes down; frequently associated with this form is a lung furrow also brought out in the same way. This, however, follows the direction of the muscular fibers and appears as a linear depression, often extending from the origin to the insertion of the muscle. To this appearance has been applied the name of fascicular or fibrillary myoidema. In tuberculosis the phenomenon is limited to the muscles of the chest and upper extremities. In typhoid fever and lobar pneumonia the author has found it as well developed in the muscles of the trunk and lower extremities as in the chest muscles. The conditions beside the pulmonary tuberculosis in which this condition has been found, include the simple and compound contraction, disease of the hip, depression of the spine, amputation based on the train pulmonary ataxia, heart disease, rheumatic fever, etc. It has also been

observed in a perfectly healthy individual. In a series of 750 cases of lung disease, it was present in 703 cases. The writer believes although this phenomenon is present in many conditions it is not without value in arriving at an early diagnosis of pulmonary tuberculosis.—*The New York Journal*, January 15th, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE ELECTRIC TREATMENT OF UTERINE MYOMATA—*Witte*.—In spite of the shortcomings of this method, it has been further studied by E. Witte, who has perfected a method which apparently gives satisfactory results. His plan is to produce firm uterine contractions by strong faradization, with the idea of causing the blood vessels to contract, and thus to check hemorrhage, while at the same time the nutrition of the tumor is interfered with, and it diminishes in size by a process of absorption. He passes one electrode through the cervix to the uterus, while the other is applied to the abdomen. If possible, the treatment is continued daily for from twenty to thirty minutes, and the current is used as strong as the patient can stand it. Both the strength of the current and the frequency of the application must be carefully regulated at the beginning of treatment in order not to overtax the patient. The author has never observed any bad effects from the treatment, and has found that the metrorrhagia is entirely controlled and the tumors are greatly reduced in size.—*Dutch Med. Woch.* Nov. 6, 1904.

WILLIAM F. BAKER, A. M., M. D.

ACID INTOXICATION.—Kelly's report is based on the observation of about 400 surgical cases. The urine of each of these cases was examined immediately on entrance to the hospital, again within from 12 to 48 hours after the administration of a general anesthetic, again, if at any subsequent time clinical signs suggested this condition, or if the urine showed the presence of acetone or diacetic acid; and, finally, the urine was examined in most cases every other day until the clinical symptoms had ceased and no longer contained a pathologic amount of acetone or diacetic acid. Of the 400 cases observed symptoms of acid intoxication were present in 46. The test used for determining the presence of acetone is as follows: To 5 c.c. of urine add a crystal of sodium nitroprussiate and sufficient sodium hydrate to render the solution strongly alkaline. This is thoroughly shaken up in a test tube. On the addition of glacial acetic acid, the presence of acetone is shown by the occurrence of a purple color to the foam. The presence of diacetic acid is shown by a Burgundy red color appearing on the addition of a strongly aqueous solution of a ferric chlorid to the urine. Of the 46 cases, acetone and diacetic acid, separately or combined, were found in the following conditions: 11 cases of appendicitis, 14 of contusions and fractures, 2 of gastric disease, 2 of carcinoma, 3 of severe lacerated contused wounds, 2 of localized septic processes, 2 of cerebral concussion, one each of salpingitis, acute multiple suppurative osteomyelitis, floating kidney, fecal fistula and enterocolitis, epilepsy, tuberculous cervical adenitis burns and typhoid fever, diabetic gangrene, hemorrhoids, and alcoholism. In 17 cases symptoms were present on entrance; in 12 cases, within from 24 to 48 hours after the administration of a general anesthetic (ether being used

in 10 cases and nitrous oxid in 2 cases); in 17 cases symptoms developed later without any anesthetic being administered and for which no cause could be assigned. Acetone and diacetic acid were present in the urine at the same time in 24 cases; acetone alone was present in 20 cases; diacetic acid alone in 2 cases; acetone, diacetic acid and sugar were present together in 3 cases; acetone and sugar in one case. In these 46 cases there were 6 deaths. In these cases where the onset could be carefully noted, the first symptom to attract attention was a peculiar apathy. This was accompanied by a peculiar, pungent, fleeting odor to the breath, a distaste for food, slight increase of body temperature, and, in most cases, vomiting, occurring without apparent cause, following immediately on taking anything into the stomach. In the mild cases the vomitus was colorless, copious and watery in character, having a foul acid odor and containing particles of semi-digested food. In the severe cases, it was dark, oil-stained, of a coffee-ground appearance, and continued so until death. In the severe cases, bicarbonate of soda was given by mouth; if retained, by enemata, subcutaneously and intravenously (in children about 200 c.c. of a 1 to 50,000 solution; in adults, 500 c.c. of the same solution) every 8 to 12 hours. To relieve thirst, enemata of salt solution were given every six hours, alternating with nutrient enemata. Kelly says that it has been proved experimentally that this condition is not due to acetone circulating in the blood and that the amount of acetone found in the urine is no index of the severity of the affection. That there is some toxemia occurring is doubtless true, but whether it is due to the presence of volatile fatty acids, with a rapid destruction of proteid matter, or to the rapid elimination of the alkalis, is impossible to say at the present time.—*Annals of Surgery*, February, 1905.

WILLIAM F. BAKER, A. M., M. D.

SUBCUTANEOUS ALIMENTATION.—*Barker* relates his experience with the use of subcutaneous and intravenous infusions of physiologic saline solution and of glucose, the latter being added as a food. The saline infusion introduces water into the body, dilutes the toxins and increases their elimination. Saline solution may also be made the means of conveying oxygen to the blood directly, thus stimulating the heart in cases of shock. The method is to shake up with warm saline solution about one-tenth of its volume of pure oxygen and to introduce this by puncture into a vein. So far, it has been only a question of supplying water to the tissues, the sodium chlorid being added for the purpose of rendering the solution isotonic with the blood. An almost equally important consideration remains. Is it possible to supply subcutaneously, or intravenously, a fluid which will take the part of a food? Such a fluid should be easily made, easily absorbed and assimilated, and otherwise harmless. Glucose is a food of considerable value; it is easy to procure, very soluble and, in proper amount, is perfectly safe when injected under the skin. In order that water or sugar may be introduced into the tissues safely, it is necessary to have the solution absolutely sterile. To do this, the substances used must be able to withstand boiling without alteration. The fluid must be first carefully graduated, so that its osmotic tension is actually, or very nearly, that of the blood. A 5 per cent. solution of glucose in pure distilled water will lower the freezing

point to 0.56 C, thus making it isotonic with the blood. Such a solution will keep for a considerable time, if sterilized by boiling, but it is best not to trust the sterility of such solutions too much. They should be injected at blood heat. For injecting the solution, Barker says a hollow needle of 1 mm. bore, three feet of small-sized rubber tubing attached to it, with a four-ounce glass syringe, without a piston, fixed to the other end. The latter is held about two feet above the patient's bed and is filled with the solution and covered with a piece of sterile gauze. When the tubing and needle are quite full and free from air, the needle is thrust through a fold of skin on the inner aspect of the upper arm toward the axilla and the fluid is allowed to run in, being replaced from above without removing the needle. This method has proved uniformly satisfactory.—*American Medicine*, February 11, 1905.

WILLIAM F. BAKER, A. M., M. D.

X-RAY IN KIDNEY DISEASE.—Cole states that it is now possible to make a diagnosis in all cases of renal calculus.

He cites a series of 179 cases in which stone was present, and in only one case did he fail to show it, this failure being due to the plate not extending high enough. Twice he has made a diagnosis of stone when it was not present. With the improvements in the technique and apparatus, and with the ray of selective absorption, it is possible to show finer gradation of shadows and greater contrast between the different soft parts. As these shadows increase, the difficulty of interpreting the plate increases. In order to make a diagnosis of calculus, you must be able to make out the size and shape of the calculus. The variety of positions the stone may be in is very great. Some stones are found within one-half of an inch of the tip of the third lumbar vertebra, others are above and external to the tip of the last rib. In order to make a negative diagnosis the spines and transverse processes of the lumbar vertebrae must show distinct, clear-cut edges all the way to the tip, and the last rib and psoas muscle must also show.—*Medical News*.

J. D. ELLIOTT, M. D.

SYMPTOMS AND COMPLICATIONS OF DUODENAL ULCER.—Moynihan has now operated upon 52 cases of duodenal ulcer, 30 of duodenal ulcer alone, and 22 cases of duodenal ulcer associated with gastric ulcer. He states that a diagnosis of duodenal ulcer is possible in many cases and unmistakable in some.

The characteristic symptoms of duodenal ulcer are pain, haematemesis and melaena. The pain is varying in character, usually burning at first and may be very slight, but by degrees it becomes worse and worse until in severe cases it may render the patient entirely unfit for work. At first it is felt in the middle line or along the right costal margins. When severe it is always worse to the right of the middle line. The time this pain comes on after eating is of very great importance, usually two to four hours after meals. Patients often complain of what Moynihan terms "hunger pain," pain which occurs about three or four hours after meals and is greatly relieved for the time being by taking something to eat. The food gives

almost instant relief, but as soon as it is digested the pain returns. For this reason the patient often eats more than usual, and as the stomach digests the food on account of the hyperacidity, there may be no loss of weight. Later, food does not alleviate the pain, and solid food may greatly increase it. In some cases in which both gastric and duodenal ulcers have been diagnosed, the pain began shortly after taking food, became less and later underwent a marked exacerbation.

Haematemesis and melaena may be present together, or either may be present without the other. In 23 cases of non-perforating ulcer of the duodenum alone haematemesis and melaena were both present in 4 cases, haematemesis alone in 3 and melaena in 2 cases. Melaena would probably be found much oftener, if all cases were carefully examined in the manner recommended by Boas to discover a trace of blood in the faeces when it is not visible to the naked eye. The other signs and symptoms which may appear later are due to the changes which occur in the duodenum and stomach as a result of the induration or puckering of the ulcer. They are precisely the same as those which are caused by the stenosis of the pylorus.

The complications of duodenal ulcer are: (1) Haemorrhage; (2) perforation, acute, subacute and chronic; (3) cicatricial contraction and induration, causing stenosis of duodenum; (4) cicatricial contraction, causing narrowing of ampulla of vater and obstruction to outflow of bile and pancreatic juice; (5) periduodenitis; (6) cancer; (7) compression of the portal vein from cicatrization of a deeply placed ulcer; (8) diseases of gall-bladder or bile ducts; and (9) disease of pancreas.

Haemorrhage.—Any of the vessels in or near the duodenum may be opened by the deepening of the ulcer. The following among the large vessels have been opened; Aorta, hepatic, gastro-duodenal, superior pancreatico-duodenal, and the pyloric, pancreatico-magae and gastro-epiploica dextra and into the vena porta and superior mesenteric vein.

Surgical treatment in copious haemorrhage from a duodenal ulcer is the surest way of arresting it. As soon as there is evidence that the haemorrhage is persisting there is urgent need of surgical measures. And the call for surgery is more imperative than in gastric ulcer for larger vessels are more often attacked and there is less likelihood of spontaneous arrest. Gastro enterostomy is the operation of choice and was successful in all cases. There are cases, however, in which an excision of the ulcer if easily accomplished may be desirable, or it may be necessary to ligate a large vessel in the ulcer.

Perforation.—Seven cases of perforation were operated, with five recoveries. The symptoms of perforation are very likely to be confounded with those of appendicitis, as the extravasated fluid follows the transverse mesocolon and then flows down the lateral gutter to the right iliac fossa.

Diseases of the Gall-Bladder and Bile-Ducts.—In ten cases in this series the gall-bladder or bile-ducts were obviously diseased, with or without gall-stones. The disease in the duodenum may be primary, secondary to, or independent of the gall-bladder disease.

Pancreatic Disease.—There were three cases of pancreatic disease. An ulcer may in its gradual deepening destroy all the coats of the bowel until the pancreas is reached. The base of the ulcer is then the pancreas, which becomes inflamed.

Either a localized, chronic pancreatitis or an abscess may form. Chronic pancreatitis may be present from the same conditions which caused the ulcer, alcohol or syphilis for instance.—*The Lancet*, February 11, 1905.

J. D. ELLIOTT, M. D.

SURGICAL SHOCK AND COLLAPSE.—From a study of shock and collapse, both clinically after operations and injuries and experimentally upon animals, J. P. Lockhart Mummery reaches the following conclusions: Shock most frequently follows abdominal operations, the most important factors being injury to, or exposure of, the peritoneum, the length of the operation, injury to organs richly supplied with nerve fibres, evisceration and extensive and prolonged manipulations. Ether and the C. E. mixture are the best anesthetics for cases where there is danger of shock. Chloroform, on account of the fall in blood pressure which follows its administration, being very unsuitable for such cases.

The time required for the operation is especially important in children and in old people.

The condition of the patient prior to operation is important, especially as regards the condition of the nerve centres.

In the treatment of shock, stimulants, and especially strychnine, are absolutely contra-indicated, as they tend to increase the severity of the condition and to retard recovery. Shock can be induced in an animal by the administration of strychnine alone. The position with the head down and the foot of the bed raised is of considerable value in the treatment of shock. Compression of the abdomen either manually in an emergency or by the application of a tight abdominal binder is a most effectual method of treatment in all cases. The establishment of an artificial peripheral resistance by the application of external pneumatic pressure affords an absolutely certain method of maintaining the blood pressure, and though not at present a practical method should some day prove of great value.

The intravenous infusion of salt solution or physiological serum will raise the blood pressure in all degrees of shock. However, as a method of treatment in shock it is disappointing, as its action is fleeting and it cannot be continued indefinitely. In collapse of severe haemorrhage it is effectual and lasting in its effects. One of the most effectual methods of treating shock that we possess is by the administration of drugs such as adrenalin, hemisine and ergot, which raise the blood pressure by increasing the peripheral resistance independently of the nerve centres.

Shock, like sepsis, can be much more easily prevented than cured, and it is to prevention rather than treatment that we must look to get rid of this source of danger in the operations of the future. With the exception of abdominal operations the method of blocking the main nerve trunks with cocaine seems to afford us a ready and a most efficient way of completely preventing shock in even the most severe surgical operations.

Morphine, administered both before and after operation, is a useful aid in the prevention of shock and does not seem to have been used as much in this connection as it deserves to be.

The best method of treating shock during or after an operation is as follows: If the operation is an abdominal one the peritoneal cavity before being closed should be filled with physiological salt solution, and if a severe

degree of shock is already present hemisine or adrenalin should be added to this solution in the proportion of 1 in 40,000. Whether the operation be an abdominal one or not a firm, tight, abdominal binder should be applied at the end of the operation and in bad cases the limbs should be firmly bandaged from the extremities upwards in addition. When the patient has been put back to bed the foot of the bed should be raised at least 12 inches; the patient should be kept warm and a nutrient enema should be given and repeated in a short time. No stimulants should be given. A hypodermic injection of aseptic ergot should be given at the earliest sign of shock and repeated if any improvement in pulse tension follows its administration. Except when positively contra-indicated, an injection of morphine should be given at the end of operation, whether pain be present or not, and if there is any restlessness afterwards, the morphine should be repeated. If, in spite of these measures, the blood pressure remains low and the patient continues in a dangerous condition of shock, a solution of adrenalin in physiological salt solution in the proportion of 1 in 20,000 should be intravenously infused at a rate of about 3 to 5 cubic centimeters per minute. The infusion should be continued until on stopping it the blood pressure is found to remain at a safe level. In bad cases it may be necessary to continue the infusion of adrenalin for a long period, but it affords a certain method of maintaining the patient's blood pressure and therefore his life.

In collapse following severe haemorrhage, intravenous infusion with physiological salt solution should be performed as soon as possible. The amount of fluid introduced should as nearly as possible equal the amount of blood lost. The subsequent treatment should be the same as for shock.—(*The Lancet*, March 18, March 25, and April 1, 1905.)

J. D. ELLIOTT, M. D.

A NEWLY OBSERVED EYE SYMPTOM IN DIABETIC COMA.—*Krause*, of Breslau, has observed in three cases of diabetic coma, pronounced hypotony. It commenced 15 to 32 hours before death, and seems to be only present in the coma of diabetes, as it was not found in four cases of coma from Basedow's disease, Addison's disease, and uremia. It may possibly be of differential diagnostic value.

No explanation of the hypotony is given. It was not found in 80 cases post-mortem, or in 18 living cases of diabetes. It is not produced by increased or diminished blood pressure, or by withdrawal of water from the organism. Anatomical examination of the eyeball showed nothing abnormal.—*Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

INTERNAL SQUINT WITH SPECIAL REFERENCE TO HEREDITY.—After 40 years' experience, during which time he had treated 2,000 cases of strabismus and operated upon them more than 700 times, *Cohn* makes the following recommendations:

1. Until the fourth year, bandage the better eye for a few hours each day.
2. In the fifth year, correct with glasses, and commence stereoscopic exercises.

3. Correct constantly the total hypermetropia.
4. Operate only for strabismus of the highest grade in the sixth year. Otherwise wait until the tenth year.
5. Promise betterment of position, but never binocular vision.
6. In strabismus of high grade, advance the external rectus.

In a series of 27,000 cases of eye disease, he had 805 of convergent strabismus, 193 of which, or 23 per cent., had relatives with convergent strabismus.—*Herman Cohn. Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

TRACHOMA.—In February, 1901, a paper was read before the Hom. Med. Soc. of the Co. of N. Y., on the non-operative treatment of trachoma, urging the scrubbing of the lids with hard twisted cotton dipped in a solution of bichloride of mercury of the strength 1-1000. The great number of cases since treated have only confirmed the opinion. Surgical treatment by the Valler forceps in cases of numerous soft frog spawn granulations materially shortens the length of time required to effect a cure, but it is inadequate without the subsequent scrubbing. After the conjunctiva has become smooth and in third stage trachoma with connective tissue formation, a solution of tannic acid, 40 grains to the ounce of glycerin, is most helpful. The patient should be posted on the contagious character of the disease and receive hygienic direction. The strength of bichloride solution for scrubbing is now used 1-500 or twice as strong as formerly, the conjunctiva being first thoroughly cocaineized.—*The Homeopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

A NEW METHOD OF ARTIFICIAL CATARACT RIPENING.—In 1881 *Förster* first practiced artificial ripening of cataract by making a preliminary iridectomy, immediately after which he massaged the lens through the cornea with a blunt instrument. The method, although failing quite often, had many adherents, because when doing a preliminary iridectomy, opportunity presented itself for its practice. Previously, attempts were made at artificial ripening by puncturing the anterior capsule and making limited discissions. This was often followed by iritis, glaucoma, or infection. More recently, *Jacqs* practiced injection into the lens. The practice of most clinicians at the present time is as follows: Unripe cataracts in both eyes seriously reducing vision, in patients over 60 years old, are extracted if the cases are otherwise favorable for operation. If, for any reason, extraction is not immediately advisable, a preliminary iridectomy is performed on one eye, and the same with *Förster's* on the other. Few practice paracentesis or discission with massage in old cataracts.

Two conditions made *Wolfberg* feel the want of a certain method of ripening cataracts. First, persons between 50 and 60 years who, after preparatory iridectomy, show no decrease in vision or even better vision. Second, cases of excessive myopia in which after the second discission, no progress has been made. Four years' experience with the hot air douche in eye diseases, and based upon the publication of *Meyhöfer* on cataract formation in glass-blowers, has led him to believe that extreme

heat is a helpful measure in artificial cataract ripening. *Hirshberg* is of the opinion that the transparent lens, if exposed frequently and for a long time to high degree heat rays, undergoes five changes which finally lead to opacity. *Hess* found experimentally that heat destroyed the epithelium of the lens capsule, and this interfered with the nutrition of the anterior lens-fibres. An experiment occasionally practiced in operating upon animal eyes is to bring near the cornea a piece of red hot iron; the lens becomes opaque and can then be easily extracted.

Wolfberg uses a hot douche apparatus. It consists of a spirit lamp, through the flame of which is passed a current of air into an asbestos tube. The air stream reaches a temperature of 100 degrees or even 170 degrees C. in a few seconds.

By direct testing it was found that at a distance of 5 cm. from the eye, the temperature of the air was 80 degrees C. and at 10 cm. 70 degrees C. With the latter application, the eye unconsciously closes, the lids and surrounding parts become red, which redness lasts for several hours. There is considerable lacrimation which subsides after using hot stupes. He seldom continues the douche at this temperature longer than five minutes. To protect the respiratory tract, wet cotton is held in the mouth. Other indications for the hot air douche seldom require so great a temperature as does cataract ripening.—*L. Wolfberg, Breslau. Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

HOSPITAL WORK WITH CONVALESCENT CHILDREN.—*Chapin* emphasizes the fact that the duty of a hospital toward an infant has not ended when the same has been pulled through an attack of pneumonia or enterocolitis. The only way in which the usefulness of an institution can be extended is by looking into the home surroundings of the child and obtaining for it pure milk after its discharge from the hospital. In this line of work the New York Post-Graduate Hospital has been particularly active and successful. A large number of children are also sent to the country and seashore during convalescence whereby relapses and deaths after dismissal from the hospital are much reduced in number.

The position of the hospital in the care of children is admirably defined by the writer. He says, "For infants and very young children it should simply serve as a temporary place of refuge where all hygienic, medicinal and surgical appliances should be of the latest and best type. After the acute illness has subsided, the case should be at once removed, as otherwise there will be constant relapses and reinfections. * * In order to insure a good convalescence, the infant must be kept in the hospital for only a short time; it must be carefully guarded from auto, and heteroinfection while there, and finally, sent out to recuperate under favorable conditions. When detained too long, certain phenomena invariably develop. Those especially to be noted are a slow but progressive loss of weight not entirely dependent on the original disease; dryness of the skin; hydremia; hypostatic pneumonia of a peculiar insidious character and great susceptibility of the mucous membranes. The latter are specially shown by bowel irritation, and vaginitis in female infants."—(*Archives of Pediatrics*, April, 1905.)

C. SIGMUND RAUE, M. D.

SUTURE AND LIGATURE MATERIAL.—In an article dealing with this subject *Congdon* (Buffalo) calls attention to a method brought out by Hofmeister and introduced to the American profession by Nicholas Senn in 1896. It is so simple and reliable that anyone may prepare his own material, and so accurate that it may be adapted for an artificial support for a few days or a number of weeks, as required by the nature of the case. The method, as modified by the writer, consists in taking dry cat-gut, which comes in strands ten feet long, and carefully test by passing through the hands and noting its strength and inspecting for weak points and irregularities. Then fasten one end to the end of a glass cylinder; for instance, an ordinary drainage tube which has a hole drilled near each end, wind snugly in a single layer, and fasten the other end similarly. Completely submerge in a 3 per cent. formalin solution. The writer finds that the sizes from No. 1 to No. 4 are necessary. No. 4 is allowed to remain in the solution for 4 hours; No. 3 for 3 hours; No. 2 for $2\frac{1}{4}$ hours; No. 1 for 1 hour and 35 minutes. After removal from the formalin solution the cat-gut is placed in running water for the same length of time that it has been in the formalin solution, and is then dried in the open air at ordinary temperature, labeled and put away for future use. This process may be termed mercerizing, since the cat-gut thus prepared may be handled precisely like silk; it does not deteriorate by repeated boiling more than silk, it is pliable and easily and securely tied, and it differs from silk only in its ultimate absorbability. The approximate time for which material thus prepared may be depended upon to furnish support to the tissues is as follows: No. 4, 7 days; No. 3, 5 days; No. 2, 3 days; No. 1, 36 hours. If gut of longer durability is desired, a 5% solution of formalin is used, and the gut left therein for double the time. When thus treated No. 4 gut will remain in the tissues for 4 to 6 weeks, but is subsequently completely absorbed.—*Amer. Jr. Obs.* Vol. 51, 47.

THEODORE J. GRAMM, M. D.

A CASE OF ECLAMPSIA WITH VESICULAR MOLE.—*Hitschmann* (Vienna) reports the case of an 18-year-old II para in whom labor set in at $4\frac{1}{2}$ months. The pains began at 3 P. M., and at 5 P. M. she had an eclamptic attack, lasting one minute, followed by deep sleep for four hours, from which the patient awakened with no recollection of the previous occurrence. At 8 P. M. she had another convulsion of three minutes' duration. Thereupon artificial delivery was instituted and the patient delivered of a vesicular mole, with no trace whatever of a fetus, the entire placental tissues having been transformed into the cystic formation. Previous to labor the urine contained 7% albumin and numerous casts. Four days after delivery the urine was free from albumin.

The author has not been able to find a parallel case in the literature, and regards his observation as highly important relative to the theories respecting the etiology of eclampsia. The occurrence of eclampsia as early as $4\frac{1}{2}$ months is quite unusual. A few cases, however, have been reported, one of which observed by Olshausen is of particular interest since in this instance the patient aborted in the fourth month, had several eclamptic attacks, and on examination the placenta showed a partial oedematous degeneration of the chorionic villi.

The case above cited indicates that the source of the poison causing eclampsia cannot in all cases be looked for in the fetal tissue changes. Aside from Veit's theory of deportation, and although doubting the correctness of the theory of syncytiolysin formation, the author believes that regarding the peripheral ovular structures as the source of the poison is an advance. While no conclusions may be drawn from a single observation, yet the suggestion may be entertained that the source of the toxin is not single.—*Zentralbl. f. Gyn.* 1904, 1089.

THEODORE J. GRAMM, M. D.

LUMBAR PUNCTURE IN ECLAMPSIA.—*Kronig* has made some experiments in eclampsia with a view of ascertaining the therapeutic value of lumbar puncture in this disease. It has been found that the blood pressure is enormously increased during the attack, simulating the conditions found in pronounced contracted kidney. This observation suggested the examination whether the pressure of the cerebro-spinal fluid in the subarachnoid space is also increased in the eclamptic woman, and he hoped to obtain a therapeutic effect by drawing off a certain amount of the fluid. For this purpose Quincke's apparatus was used. While the pressure normally is about 120 m.m., in eclampsia it may rise to 500 or even 600 m.m. Relatively large quantities of cerebro-spinal fluid may be drawn off before the pressure falls to normal; thus, in one case 37.5 ccm., in another 47 ccm. were withdrawn. While all three cases recovered, it could not be determined whether lumbar puncture had a beneficial effect. At all events no immediate results appeared. Neither could it be determined whether the general improvement, appearing after seven or eight hours in all the cases, should be ascribed to the lumbar puncture.—*Zentralbl. f. Gyn.*, 1904-1153.

THEODORE J. GRAMM, M. D.

RETENTION OF A MATURE EXTRA-UTERINE FETUS FOR FOUR YEARS.—*Demelin* and *Bouchacourt* report an unusual and interesting case. During the early months of pregnancy the patient suffered from repeated attacks of pain in the abdomen, but a correct diagnosis was not made. In the eighth month she was thought to be suffering from obstipation, peritonitis from an unknown cause and gall stones, in addition to pregnancy. In the ninth month the fetal motions suddenly ceased. This was followed by profuse galactorrhoea and the patient was much improved. At this time a vaginal examination disclosed an orange-sized nodule in front of the abdominal tumor which was thought to be a fibroid, but which probably was the empty uterus. One year subsequently the diagnosis of extra-uterine pregnancy was made, but since the patient was not ill, she was not urged to operation. Three years after this time the patient suffered from severe pains in the abdomen and urgently requested operation. The fetal sac was found so densely adherent that it could not be removed, and consequently was only drained. The fetus weighed over six pounds, and showed advanced mummification.—*Abs. in Zentralbl. f. Gyn.*, 1904-1195.

THEODORE J. GRAMM, M. D.

ECLAMPSIA.—*Allen* (Baltimore) reports the results obtained in 33 cases of eclampsia, and in 10 cases of severe toxæmia of pregnancy, occurring among 3,400 obstetric cases in the hospital of the University of Maryland. A most satisfactory, practical discussion follows. He scores a point, fully corroborated by the experience of those of us who see a number of cases, when he says: "The statement that eclampsia is a disease that, without any warning, flashes out like lightning from a clear sky, is certainly not in accord with my own experience. In every one of our cases, premonitory symptoms were present . . . and these can be recognized in the majority of instances early enough to prevent the convulsions, by immediate treatment." The conclusions reached are as follows: Eclampsia is due to a *toxin*, which very probably has its origin in the liver. Its origin is maternal rather than fetal. Premonitory symptoms are *always* present. The most constant and important premonitory symptom is frontal headache. The diagnosis of toxæmia of pregnancy should be made early, and if the patient is under observation this can generally be done. The mortality should be kept under 20 per cent. Treat premonitory symptoms until in spite of the treatment they get worse, then empty the uterus, as in some cases this is the only method of stopping the progress of the disease. Deliver as quickly as possible, consistent with cleanliness and preservation of the soft parts; bleed, removing 300 to 700 c.c., as the case may indicate; infuse, giving from 500 to 1,000 c.c. of salt solution, depending upon the amount of blood withdrawn and character of the pulse; this may be repeated later; morphia, $\frac{1}{4}$ gr. hypodermatically to relax the muscular system; croton oil one or two drops in olive oil, followed by half an ounce of saturated solution of magnesium sulphate until effectual as purgative. Milk and water diet. Other conditions treated symptomatically.—*Amer. Jr. Obs.* Vol. 51-155.

THEODORE J. GRAMM, M. D.

RESULTS OF FOURTEEN HUNDRED OPERATIONS FOR THE RADICAL CURE OF HERNIA IN CHILDREN.—W. T. Bull and W. R. Coley report in detail the results of over 1400 hernia operations performed at the Hospital for Ruptured and Crippled between 1891 and 1904; 1354 of these operations were for inguinal hernia and they were performed according to Bassinni's method using chromacized kangaroo tendon for suture material. Eleven relapses in all were noted, and the authors conclude that the majority of recurrences take place during the first six months after operation, and 90 per cent. occur during the first year. The authors treat all cases of hernia in children, with a few exceptions, with a truss for one or two years before advising operation. Under the age of four years many cases of inguinal hernia and nearly all cases of umbilical hernia can be cured by truss treatment.—(*Medical Record*, March 18, 1905.)

J. D. ELLIOTT, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

TYPHLITIS OR COLITIS, AND APPENDICITIS.—Dr. Benjamin F. Bailey says that for some years past, it has been his belief that a large per cent. of these conditions, that have not presented an acute marked, apparent appendicular inflammation, were probably not necessarily operative cases; with the result that he has made it a rule to insist upon operation if there was evidence of repeated, acute attacks with temperature, local rigidity and other classical symptoms; but, unless these were evident it was his duty to assume somewhat the conservative; and he has yet to find a single case in which conservatism has seemed to be indicated, that has not recovered perfectly. This observer has made it a practice to differentiate most carefully between typhlitis or colitis and true appendicitis; and he has found very few of the so-called "recurrent" cases of appendicitis or of intense caecal discomfort of long duration, which have not been absolutely curable. He believes that actual inflammatory appendicitis usually results in such marked symptomatology as to render an operation imperative, or else in improvement and recurrence in all its severity; or, greater severity comes in a very short time, or the patient recovering from the first attack, and remaining well for a long time, there has probably been, as the result of inflammation, the closure of the appendicular orifice, with semi-atrophy and resultant comparative safety. His treatment has consisted of a combination of thorough emptying of the bowels, electricity and measures tending to improve the circulation of the parts and to favor peristaltic action in the intestine. He administers the indicated remedy, with a tablespoonful of pure olive oil, one hour before each meal. He applies the positive galvanic current, by means of a large flat electrode, over the regions of the caecum and ascending colon. He also institutes massage and gives physical instruction.—*Progress*.

HYPERICUM IN INJURIES OF THE COCCYX.—Dr. Kent recommends this remedy for injuries of the coccyx sustained during labor. If given early in such cases, *Hypericum* may be sufficient, but later on we may require other remedies; notably, *Silica* and *Carbo animalis*.

TREATMENT OF SYPHILIS.—From Mr. C. H. Duncan's report of Dr. Bukk G. Carleton's lecture, in *Chironian*, we learn that this eminent teacher thinks that the hygienic management of a case of syphilis deserves more

attention than is generally given to this branch of its therapeutics. The original lesion must not be cauterized, but may be kept in a cleanly condition by frequent douching with solutions of either peroxide of hydrogen, bi-chloride of mercury, electrozone or borolyptol. It may be protected either by frequently changed stupes of "blackwash" or calomel, or a powder composed of equal parts of zinc oxide and starch or dermogen. During the primary stage, the patient must be treated symptomatically. Mercury is rarely indicated during this stage. *Corallium rubrum* 3x., *hepar* 30x., *echinacea* ten drops, *phytolacca* or *aurum* 30x., are frequently employed with benefit. When the constitutional symptoms make their appearance, mercury in some form is generally homœopathically indicated. It should be vigorously pushed. The future as well as the immediate health of the syphilitic depends upon the proper adjustment of its dose. After the diagnosis of syphilis has been positively established, our first duty is to assure the patient that his disease is curable if he will implicitly follow directions. He must discontinue the use of liquors, beer, sweets and acids. He must not use tobacco in any form. It is noticeable that most authorities insist upon syphilitics giving up the use of tobacco; yet few of them follow these directions. Water should be taken in large amounts. Salt water sponge baths are useful. During the primary stage, the teeth should be examined and put in good condition. This prevents irritation of the tongue which, if neglected, may be the cause of mucous patches, leucoplasia and gummatous manifestations upon the tongue during the constitutional period. The habits should receive proper attention. Plenty of sleep, moderate exercise, out-of-door employment. Nerve strain must be avoided.

PNEUMONIA IN CHILDREN.—One cannot read the interesting paper of Dr. Byres Moir, in *Monthly Homœopathic Review*, and the discussion which followed its presentation without feeling deeply impressed by the unanimity of opinions expressed by the members of the British Homœopathic Congress upon this important subject—the treatment of pneumonia. The comparative statistics given by this essayist are startling. A mortality of only three per cent. in croupous pneumonia, and only sixteen per cent. in broncho-pneumonia, in children up to the age of five years. This is against a mortality which is usually put at from 4 to 12 per cent. in croupous and from 30 to 50 per cent. in broncho-pneumonia. And yet the remedies prescribed were few and simple. *Aconite* and *Veratrum viride* in the early stages, *antimonium tartaricum* in broncho-pneumonia, *phosphorus* and *bryonia* in the croupous variety; *iodide of arsenic* in the convalescent stages. Not a single dose of laxative medicine was given in any one of the 233 cases. Dr. Hayle, stated that in an experience covering 25 years, he had lost but four cases of lobar pneumonia. This physician obtained his results from *aconite* 1x. or tincture in the first stage; then *phosphorus* every four hours and *bryonia* each hour in the second stage; if the temperature went above 104 degrees, he gave *veratrum viride* 1x. or tincture instead of bryonia, still keeping on with phosphorus every four hours. He believed phosphorus to be the sheet anchor in lobar pneumonia, while the less deeply acting remedies, should be given between the doses of phosphorus. In catarrhal pneumonia, he gave *antimonium tartaricum* every four hours, with *ipe-cacuanha* each hour.

Dr. Newberry thought that our remedies were better than poultices. He believed poultices had killed children who might have recovered without them. *Tartar emetic* and *sulphur* were his favorite remedies. Dr. F. H. Bodman said that aconite 3x. was preferable to the 1x. The latter had sometimes produced symptoms of collapse in children. Dr. Lambert praised *chelidonium* when the affection was upon the right side, and when there was a yellow diarrhoea. Dr. Speirs Alexander reported a case of right-sided pneumonia with jaundice, that had recovered under *chelidonium* 3x. The condition was most serious. Dr. Wynne Thomas had found the Leiter ice water coils very useful. Dr. Dyce Brown thought that pneumonia might sometimes be aborted by aconite. The hopeful attitude of these men, and their splendid results from simple homœopathic treatment, is in marked contrast to the doleful experiences and hopeless expressions of some of our friends who will not believe.

SULPHUR TYPE OF FACIAL NEURALGIA.—Dr. Malcolm E. Douglass, whom we all recognize as a careful observer, relates a case of severe facial neuralgia occurring in a woman aged sixty years. Both sides were involved. The left side being especially the seat of shooting, lancinating, darting, burning, tearing and drawing pains. The slightest motion of the face or moving of the lips, caused "frightful torture." Talking or even bringing the lips together were, therefore, aggravating. The pain involved the lips and tongue. We can readily recognize this as a very aggravated case of prosopalgia. Of course such a case had received much treatment. When we say that the neuralgia had been present, in varying degrees of severity, for twenty-eight years we can understand that she had taken about all known remedies. Dr. Douglass tried several remedies such as *Verbascum* and others, but obtained no amelioration. He finally ascertained that the patient, when a girl of seventeen, had suffered from the *itch*, which had been cured by external applications. The author informed the patient that the suppression of that disease had been the cause of her neuralgia, and promised to give her a remedy that would cause the eruption to reappear. *Sulphur* was prescribed. In due course, out came a fine eruption of *eczema capitis*, and the neuralgic pains disappeared like magic. Dr. Douglass did not succeed in curing this eruption as quickly as his patient thought it should have been removed, so she again resorted to an ointment which quickly drove it away. But, again, her neuralgia appeared. She then came back to her homœopathic friend, but, alas, this time he could neither relieve the pain, nor cause the eruption to reappear. The patient again changed physicians, and died from slow starvation. It ought to be stated, in addition, that nerve stretching and nerve excision had also been tried without effect. (*American Physician*.) There may be several theoretical explanations of this case, but the prompt appearance of a skin eruption, with amelioration of all pain, is the one fact that appears most important. We have seen such things several times.

OBSTETRIC REMEDIES AND METHODS.—Dr. H. F. Biggar, in *American Physician*, says that he has not always been successful in curing his cases of vomiting during pregnancy, with internal remedies. He is apt to use local measures such as the application, upon saturated wool tampons, of the

following ointment: Extract of belladonna and extract of opium of each twenty grains; lanoline and cosmoline, of each half an ounce. Before applying, the parts are to be thoroughly cleansed with the following preparation: Thymol, one drachm; alcohol, six ounces. One drachm of this mixture is added to a quart of water for purpose of douching. The author uses this same formula applied upon cloths over the vulva. He also sprinkles it about the room and may use it to irrigate the parts, should sepsis supervene. This formula has been used at the Bonn Maternity Hospital, for twenty years without a single case of fever having occurred. The dilute solution above given, is the proper one for these purposes we presume.

Rigid os during labor may call for the same treatment as that above mentioned for nausea and vomiting of pregnancy; if *gelsemium* 2x. should fail or if atropin hypodermatically should not prove to be relaxing. The latter is recommended in doses of the 1-120 of a grain. Norwood's tincture of *veratrum viride*, in one, two or three minim doses, is recommended as the best remedy for lowering a high temperature. For metritis, salpingitis or ovaritis, the ice bag is a useful adjuvant. If the uterus is slow in returning to its natural size, prescribe *viscum album* 1x. For sore nipples, apply Friar's Balsam or lactate of lead ointment. Friar's Balsam is compound tincture of Benzoin. For leucorrhoeal discharges following birth, use infusion white pond lily—one drachm to pint. For cystitis, *benzoic acid* 2x. For eclampsia, *veratrum viride* is again suggested as the best remedy. In this instance, from five to ten minims may be necessary. It may also be useful to insert a suppository containing five or ten grains of chloral hydrate, every two or three hours. When the feet and ankles swell during pregnancy, examine the urine, of course. If its volume is lessened or the quantity of urea excreted is insufficient, give *apis* 2x., *arsenicum* 3x., or acetate of potash in ten grain doses. Also restrict the diet to skimmed milk. Some of these suggestions will not please our readers, but the author is giving us the benefit of his experience and therefore his hints are worthy of careful consideration.

FOREIGN LITERATURE.

P. W. SHEDD, M. D.

SOME REMEDIES IN CHRONIC WEAKNESS AND MARASMUS.—*Abrotanum*.—Marasmus of children, the emaciation progresses from below upwards, the legs being thin while face and abdomen are still well-nourished. Later, a pitiable appearance, pale, with blue rings about the eyes, senile face, distended belly. Constant bulimia. Alternating diarrhea and constipation, with lenteria. The child is irritable, peevish. Long-lasting weakness after influenza, measles. No gastric digestion. Weakness from onanism, frequent pollutions, with sacral pains.

Acetic acid.—Marasmus with striking emaciation. The stomach tolerates no food. Burning in the stomach and vomiting after every meal.

Night sweats. Tendency to hæmorrhage from every organ in the body. Tendency to edema.

Alumina.—Great weakness; must lie down, even speech is prostrating; paralytic weakness of all muscles; of the rectus internus (strabismus); ptosis; weakness of the rectal muscles so that even a soft stool requires great exertion; vesical weakness, with slow flow of urine; paralytic weakness of the vocal chords; slow, stumbling gait. Is always cold and desires covering, but, nevertheless, longs for the fresh air, with consequent chilling and cold. Skin dry, lifeless; loss of hair. Mind weak; makes mistakes in speaking and writing; tortured by uncontrollable impulses and ideas. In spite of the weakness there is inward restlessness; does everything hastily. Vertigo. Impotence. Flow of prostatic fluid at stool. Ailing women, weakened at every menstruation. Ailing, thin individuals with long-lasting and relapsing catarrhs. Children weak, dried-up; who have been fed on all sorts of artificial food; always dyspeptic; always with dry catarrhs.—*Dr. Dahlke. Berliner Zeitschrift.*

RANULA: Ferrum Phosphoricum.—Case first seen June 23, 1903. Girl, æt. 19, healthy, sanguine constitution, ruddy complexion, delicate skin, blonde, blue eyes. Since May, 1903, a left sublingual swelling which now hinders movement. Came for treatment of an attack of grippe with cough and hoarseness which was cured. The ranula resisted all medication, including Thuja and other drugs, until September 25, when, because of the sanguine, vascular constitution *Ferrum phosphoricum* 1 cent. trit. 50 centigrams (7 grs.) daily for a week was given. Eight days later, October 2, the swelling had begun to decrease. The drug was continued for two weeks. On October 16 there was great diminution and the treatment was continued with *Saccharum lactis* until November 20, when the ranula was gone. In February, 1905, the girl was again seen but there had been no reappearance of the tumor.—*Dr. Schmitz. Journal Belge d'Homeopathie.*

GONORRHEA: Thuja.—No remedy is so closely related to acute or chronic gonorrhea as Thuja. The urethral discharge gives no keynote indications, but the concomitant phenomena of the urinary organs are characteristic. There is hardly any disturbance in micturition or urine which is not also found in Thuja. The urine may be abundant, pale, clear on passage or, scanty, dark, cloudy, sedimentary. It leaves a slimy deposit on the vessel. The odor is offensively sweet or onion-like, pungent, biting. With it the patient has burning and cutting in the urethra especially after micturition, as in *Cantharis*. The urine may contain blood, albumin, gravel. Sometimes there is pollakiuria, sometimes long intervals between micturitions. There may be involuntary urination, day or night, and the history of gonorrhea is seldom absent.

Any Thuja case without urinary complications is an exception to the rule.—*Dr. Oemisch. Zeitschrift des Berliner Vereines.*

A NEW FORMULA FOR CARDIAC DROPSY.—General dropsy due to cardiac disease yields to the following prescription, given in the form of a tablet: Extract of sourweed leaves, two grains; extract of elder flowers,

two grains; extract of squills, one-quarter grain. Take one or two tablets three times a day.—*Dr. Hobart A. Hare.*

STIGMATA MAIDIS.—The fluid extract of corn-silk found in the common pharmacies is of little or no use. The tincture or maceration (decoction) of the green silk is of value. The stigmata, properly prepared, act specifically on the genito-urinary tract. In renal congestion, dysuric polyuria, chronic diseases of the kidneys and bladder, and in Bright's disease it aids in diuresis and acts tonically upon the renal tissue.—*Dr. Pinart. Revista Homeopatica de Barcelona.*

UTERINE ATONY: KALI PHOSPHORICUM.—*Dr. Fischer (Leipsic)* commends this drug in uterine atony; in all cases where, before confinement this condition is foreseen, as where the previous labor was atonic or in elderly primiparae or when the individual is generally weak. The remedy is given for four weeks before labor, xxx t. i. d., about a grain.—*Hom. Monatsblätter.*

CHLOROFORM: CARDIAC DISEASE.—Huchard answers the question: May a patient with cardiac disease, arterial, valvular or aortic, be chloroformed without danger? with an emphatic affirmative. Any cardiac patient may be chloroformed, and the anesthetic is less dangerous than for a patient with any other affection, especially pulmonary of a dyspneic type. He sees no contraindication, save an asystolic state; a tonic dyspnea of alimentary origin, or an acute pulmonary edema, all of which may be removed by appropriate medication. I recall, in support of Huchard's view, an old lady, aet. 70, suffering for years from arterial lesion, who had several crises of asystole causing a hernia which threatened to strangulate. The urgent operation was performed by *Dr. M. Cazin*, and I administered the chloroform; not only was there no accident, but I have seldom seen so easy an anesthesia.

Huchard adds that chloroform is so little dangerous that there need be no hesitation in using it in angina pectoris, and *Vergeley* remarks, "In stopping the excitations proceeding from the cardiac plexus, and which, by over-stimulation of cardiac movements threaten to stop it, as do rapid multiple electric discharges directed against this organ, the anesthetic suspends the sensory excitation, or at least moderates it, and thereby prevents the terrible consequences." Amyl nitrite, however, is more efficacious.

Huchard concludes:

I. Accidents imputed to chloroform are no more frequent in the majority of cases in heart or aortic diseases than in other affections.

II. Cardiac or aortic affections are not contraindications to chloroform unless,

- a. They are acute infections.
- b. The system be too weak.
- c. An asystolic or dyspneic condition be immediately present.
- d. There be pericardial adhesions.

III. In heart or aortic disease chloroform should be administered in dilute, progressive and continuous dosage until there is a nearly complete suppression of the palpebral reflex.—*Dr. M. Jousset. L'Art Medical.*

A PATHOGENESIS OF TELLURIUM.—Morning vertigo. Heaviness of the head with sopor. Itching at the nape of the neck. Fluent coryza with lachrymation, deafness, and noises in the left ear. Itching in the ears. Cough with sternal oppression. Painful contraction of the muscles of the left side of the face, chiefly when talking. Facial acne. Irritated gums, bleeding easily, with much salivation. Throat pains, disappearing on eating. Gastric pains with debility and fainting. Colic, tenesmus and diarrhea with fetid flatus. Anal pruritus after each defecation, with constant desire to urinate. Perineal pruritus with vesicular eruptions. Erections during the whole night. Pelvic pains; pains in the cardiac region with accelerated pulse, vertigo and nausea. The spine from the last cervical to the fifth dorsal is very sensitive, as if bruised. Sacral pains progressing along the right sciatic. The skin pricks, burns, tumefies; there is violent pruritis, especially in parts that sweat. An aqueous substance flows from the ears which produces a vesicular eruption on the skin. Fleshy tumors in the canthi.

Indications.—Spinal irritation with malaise, from the last cervical to the fifth dorsal. Sciatica. Painful spasms of the masseter. Headache made worse by the least movement. Otitis media suppurativa with perforation of the tympanum. Otorrhea with a clear irritant secretion. Aural eczema. Skin troubles (lichen, prurigo, herpes, eczema). Blepharitis with eczema and otorrhea. Spermatorrhea. Impotence. Anal pruritus.—*Joya Homœopatica*.

GLAUCOMA ACUTA: ADRENALIN.—A patient, aet. 37, was cured by M. Grandclement of a violent attack of acute glaucoma by instillation of adrenalin 1-5000 every half-hour for three consecutive days. The result convinced him that the various glaucomas might be cured as well, if not better by adrenalin than by the classic iridectomy, which fails in half the cases. The method of employment seems to emphasize that it should be used frequently and long enough to stop the intraocular secretion, thus definitely limiting the hypertension. But care must be taken to avoid inducing a dangerous and irremediable hypotension. (Cf. Adrenalin Proving in The Chironian, May, 1905.)—*Bulletin General de Therapeutique*.

A GRIPPE SYMPOSIUM.—(*Societe Medicale des Hopitaux*.) Bezancon and Jouy. These authors examined systematically sputa during the second epidemic of gripe. They never found Pfeiffer's influenza bacillus. On the contrary, they often found the pneumococcus, the streptococcus (sometimes called the enterococcus), and in some cases the bacillus of Friedlander. They frequently noted micro-organisms, some of which resembled morphologically the gonococcus, others, the micrococcus tetragenus. Hence, there is no specific bacillus of gripe.

Menetrier has verified and published the fact that in gripe various micro-organisms are found, of which the pneumococcus is dominant.

Berger. It is impossible to diagnose gripe, which is an ill-defined disease.

Apert does not believe that the specificity of gripe can be denied.

Bezancon emphasizes the variability possible in gripe, but he does not believe in the microbic specificity of the disease.—*Gazette Medicale de Paris*.

This is very interesting news from Paris. Qui sait?

THE HAHNEMANNIAN MONTHLY.

JULY, 1905.

OPIUM.

BY JOHN HUTCHINSON, M. D., NEW YORK CITY.

(Lecture in the Practitioners' Course of the N. Y. H. M. C. & H. May, 1905.)

WE cannot even name this drug without being confronted with a mental picture of its hypnotic and toxic power. Much of medical tradition is inseparable from an association with the well-known effects of the Persian *Papaver somniferum*. The milky exudate of this poppy has administered to millions upon millions of human sufferers. That one quality of the medicine, its deadening character, which bestows unconsciousness, oblivion, upon the patient, and diminishes or severs his relationship with external nature, is all too well known. This attribute has been, is, and will be craved, welcomed, ignorantly blessed, fearfully abused, and intolerably beloved by the human race.

As a remedy in the hands of the medical profession at large its usage covers a wide area. To-day we have to discuss not that usage in the field of palliation, nor in other fields when selected as a depressant, or as an antispasmodic. Such employment does not repay further study. Opium interests us only as a remedy that is really *curative* of diseased conditions.

Let us remember that this sphere of the remedy has been demonstrated by the Homœopathic school of medicine, which alone has developed the real value of the medicine in opposi-

tion to traditional prescribing. It was obvious to Hahnemann that such a drug as Opium had in it unique therapeutic value, and much power for good instead of harm. He therefore devoted himself to diligent examination of the symptoms and disturbances that it could produce in the healthy subject.

When introduced into homœopathic practice, Opium was recognized as a complex remedy. This was prior to the isolation of all the alkaloids. The remedy in the form "as nature gives it," was investigated through many provings. Its effects were difficult to classify and appreciate. Hahnemann wrote:

"It is much more difficult to observe the effects of Opium than those of any other drug."

Again—

"The primary symptoms of large doses are not only dangerous, but they frequently succeed one another with a sort of tumultuous hurry, and are frequently intermingled with secondary effects, or suddenly change to the latter."

A curious and remarkable fact is established by a wide variety of drugs belonging to our pharmacopœia. Remedies evincing deeply-acting powers, remedies vieing with each other in this respect, do not belong in any one physical, chemical, or other class. These remedies range in variety from this most ancient medicine, Opium, to *Calcarea ostrearum*, introduced by Hahnemann himself; from *Lycopodium*, for long before our adoption of the giant remedy, considered by the majority as medicinally inert, to *Natrum muriaticum*, our table salt of daily use, but when properly potentiated capable of removing absolutely the roots of deepest disease; from Sulphur, the much-abused, to *Causticum* of complete proving, curative of profound paralysis.

This fact of seeming non-relationship of remedies to each other, but undeniably related to equally serious states of disordered health, even to the most deeply-seated chronic diseases, so-called, proclaims the inexpediency and futility of the ordinary conventional classifications. A much higher association must be apprehended by him who would heal the sick. A remedy is only interesting to the physician and to the patient when it is practically successful in removing illness. The only guide we have in the selection of the specific remedy is our knowledge of its proving, and, therefore, discernment that the symptomatology of the proving, in its characteristic totality,

corresponds with the symptomatology of the case to be treated.

Belladonna may be called for in acute conditions of the patient whose chronic remedy is Calcares. Bryonia is often the acute analogue of Alumina. Pulsatilla and Silica, or perhaps Thuja also (and often Graphites) stand in the same relation; Ignatia and Natrum muriaticum; and so we might go on indefinitely with all the remedies in the *Materia Medica*, but for the fact that we do not know all the remedies well enough. Some are insufficiently proven, and those adequately proved are inadequately studied.

The exact sphere of Opium is not generally appreciated by the majority of physicians—even those who aspire to the homœopathic prescription, perhaps the most difficult thing in all medicine. The homœopathic prescription involves the simillimum, the potency, the dose, its repetition, and a wealth of non-interference with that prescription.

It should be remembered in respect to Opium that no proving elicits any symptom of pain. Torpor and indolence are most characteristic. The nervous system is paralyzed. (*Canabis indica* is Opium's analogue.)

Although we do not yet know its full range or measure of power, Opium is well understood to be a chronic remedy, deeply acting, and capable of rousing latent forces in the sleepy organism that persistently fails to respond to other medication. (Compare *Carbo veg.*, *Valerian.*) In such cases is often discernable a symptom totality calling for Opium alone, while other remedies have been vainly exhibited.

As *painlessness* is one of the great characteristics of Opium, when we have a painful condition to treat, it will be rare for us to find Opium called for by the symptom totality. Opium cannot produce pain as a primary symptom. When pain is the prominent condition to be overcome, some other remedy is the one needed.

Consider for a moment the remedies that are available in post-operative disturbances. Do not imagine that these remedies will not avail when trauma is great. Incised wounds, painful sensations from cut tissues—*Staphisagria*. Punctured wounds may call for *Ledum*. Bruised sensations are relieved by *Arnica*. *Calendula* may be the better remedy here where nerve injury is prominent. *Hypericum* may be still better. *Rhus tox.* when injury involves the joint, and the ligaments are affected.

Opium has no relation to any of these conditions in themselves. The other drugs mentioned are the ones first to consider. They will bring relief if properly selected and administered. Frequently, however, when these painful conditions have not been properly met and relieved, time has dragged along, the patient has become hypersensitive, and mental exaggeration of discomfort is associated with oversensitiveness to light, sounds, and odors, Opium is certainly suggested. It must also be remembered that *Chamomilla*, *Nux vomica*, and *Coffea* are indicated by such conditions, and the best remedy must be selected. Here if Opium be the remedy most appropriate, the face may be pale and set, the eyes staring, with pupils either contracted or dilated; there is hot sweat; there may be muscular twitchings. There is little doubt that either Opium or Morphine in potency would be of very great utility when selected on these indications alone.

Opium symptoms, primary and secondary, are so united, as are likewise the mental and moral symptoms, that to separate them is a task requiring much knowledge of many provings of this unique medicine, if, indeed, it is possible to separate such symptoms at all.

But it is not necessary always to separate the primary from the secondary symptoms in selecting our totality for the cure. The symptom totality gives an unfailing picture of the malady, and of the drug which will picture that individual case of the malady, and which also will, when properly administered, cure it. It matters little whether is present constipation or diarrhoea; dilated or contracted pupils; flushed face or pale; stupor or lightest slumber, so be that the other conditions are such that the picture of Opium is outlined.

Hering insisted that Opium is one of our drugs that upon the right view of its symptoms obtained by proving depends our progress as a school.

The aggravation of Opium is during and after sleep. (*Apis*, *chel.*, *lach.*, *spong.*, *stram.*) While perspiring. (*Tilia.*) From warmth, and stimulants. (*Zinc.*)

Amelioration from cold, from constant walking.

With all complaints there is drowsiness and irresistible desire to sleep. (*Nux m.*, *ant. tart.*)

Sleepy, but cannot sleep. (*Bell.*, *cham.*, *stram.*, *chel.*)

All five senses more acute. (*Bell.*, *coff.*, *cham.*)

As soon as he falls asleep breathing stops. (Am. c., grind., lac. c., lach.)

Unrefreshing sleep, more tired on rising than when retiring. (Bry., con., hep., mag. carb., sulph.)

Sleepy and dazed. (Nux. m.)

Hears clocks on distant steeples. (Nux. v., china.)

Stupor.—Opium relieves the cerebral congestion, then Plumb. may be needed to follow.

Delirium, desire to escape. (Bell., bry., rhus.)

Convulsions without consciousness. (Bell., cic., hyos., stram.)

Convulsions of children after mother's fright.

Convulsions aggravated by heat, (Apis) from fright. (Acon., ig., cicuta.)

The value of Opium in constipation is very definite. In nursing babies, with convulsions after mother's fright. In old people (Alumina, lyc.) No desire for stool. (Nux. v., bry., sulph.) Bowel inertia. (Sanic., pyrogen.) Black stools. (Ars., lept.) Stool in round balls like sheep dung. (Chel., plumb., thuja., pyrogen, v. alb.) Constipation with horribly offensive breath. (Carb. ac., psor.) With stercora-ceous vomiting. (Plumb., pyrogen.) Headache from constipation. (Aloe, bry., collin.)

There may be a more or less constant oozing of watery faeces in a case of true Opium constipation. A persistent diarrhoea is characteristic in those cases that have been treated with large doses of the drug. A painless diarrhoea is characteristic, but constipation predominates; there may not be the least inclination to stool, though fetid flatus escapes.

The urine, sometimes copious in paralysis, is usually scanty and is infrequently voided. The stream is retarded or interrupted, owing to spasm of neck of bladder. In horses there is retention from overexertion. Retention is the rule in general rather than incontinence. In Opium the bladder is full, but the condition is unrecognized, therefore retention, or vice versa. (Urine suppressed, Stram.)

Post-partum retention or incontinence of urine. (Arn.) No desire. (Hyos. arn.) Urging to urinate after labor. (Staph.)

For practical utility a remedy must be fixed in the mind as an unalterable entity. And so our knowledge must deal with the great characteristic features of that remedy, and not be

weakened by the futile attempt to memorize the multitude of symptoms that belong to all or many drugs in general. The drug picture must be sharp and distinct, and possess its own clear-cut individuality.

Our study of this remedy is centered in the most careful possible consideration of the effects which Opium will produce in the human subject. It may be repeated that pain is *not* one of these effects. The primary symptom of pain is not produced by Opium. Homœopathy selects other remedies for pain—remedies which produce pain in their provings. Consequently, Opium is to be used for conditions in which painlessness may be clearly observed, though the diseased state on the objective side is perhaps very serious. Absence of pain, lack of sensation, dulness, or want of bodily irritability, these are the most characteristic features of Opium.

It is said that usually the patient requiring Opium is light-haired, but this distinction is not by any means striking, as far as I have been able to determine; though it may perhaps be accepted as a fact that bodily and temperamental irritability are more often characteristic of the dark-haired individual. And, as stated, in the Opium patient we find always diminished irritability, even a lax muscular system.

Opium complaints are right-sided, or they may involve the upper left and lower right sides. The Opium patient may be suffering from the effects of Mercury, Strychnine, Digitalis, Charcoal vapors, or Plumbum poisoning.

The mental state of Opium has gentleness, cheerfulness, loquacity, hilarity, boldness, rage, and on the extreme other hand, indifference. There may be easy comprehension; oftener it is difficult, when the patient will say nothing but "yes." There may be ecstasies, fancies, or mental dulness; but the state is one of imbecility more than that of insanity. Complaints follow and are the outcome of excessive joy, rage, vexation, shame, or *fright*. Memory is oftener active than weakened.

Instead of insomnia we have somnolency, with perhaps pleasant dreams. Should there be sleepless hours, they will come before midnight.

There is insensibility or numbness of internal (Ars.) and external parts, trembling sensation of external parts, and sense of heaviness of internal parts. Muscle twitching (especially of single fibrillæ) is characteristic. (Formication under the skin, Secale.)

Heat of the body predominates, with inclination to uncover; worse during sweat, better after sweat. The thirst is almost only between the stages of fever and sweat. Opium generally lacks thirst. The sweat is on the upper part of the body, while the lower limbs are hot and dry.

Complaints are aggravated by wine, light, warmth, warm air, lying on the side, on awaking from, and after sleep; on closing eyes, sitting erect, looking sideways. There is aversion to open air, but fresh air rather ameliorates than aggravates the complaints. There are night and morning aggravations.

Amelioration follows cold, darkness, sitting bent forward, and lying on back. Amelioration after sleep is rare. Pressure, contracted posture, drinking coffee, micturition, and sweat ameliorate. There is remission of complaints during day and evening.

The pulse of Opium is somewhat variable, now large, now small in the same person. It is usually full and slow. (*Digitalis*.) Respiration is oftenest slow and loud. There is dry cough, dry coryza. Expectoration is infrequent during daytime. Saliva is decreased. Loss of smell and loss of taste. Sometimes bitter vomit.

"Complaints predominate on under lip." Skin of face is dry and flabby. (*Bar. c.*, *sarsp.*) Face pale, wrinkled, old. (*Abrot.*) *Marasmus*. Opium is a remedy for the suppression of sweat. Skin secretions are also increased. Suspended function of tissues, as with ulcers, which are non-irritable.

Opium may be indicated in any possible diagnosis. That is, the symptoms calling for Opium may be present whatever the disease to be treated. *Lilienthal* has shown in his "*Homœopathic Therapeutics*" just how useful the drug may be. It is only necessary to carry in mind the great key-notes of the remedy in order to perceive its applicability when needed.

All complaints after fright (*Acon.*, *ign.*) perhaps with the fear remaining, may demand Opium. The symptoms preceding an attack of apoplexia—dark red, bloated, hot face; frequent desire to sleep, or sleeplessness; dulness of sense, vertigo, heavy head; buzzing ears, hardness of hearing, staring look—these call for Opium. This remedy is required during the attack if the following conditions are present:

Tetanic rigidity of whole body; dilated, insensible pupils,

stertorous breathing; convulsive motion and trembling extremities; foam at mouth; comatose sleep, snoring, lower maxilla hanging down; impossible to rouse patient; when patient wants to lift head it is so heavy as to fall back. If Opium fails in such a case as this, follow with *Apis*.

Both Opium and Glonoin have clot in brain, shiny skin, cold extremities.

When the jaw drops think of *Lycopodium* and *Muriatic acid* as well as of *Opium*.

Opium has hot sweat, patient throwing off covers; while *Nux vomica* has hot sweat, but patient keeps the covers on.

When the head and body are hot and steaming *Pulsatilla* must also be considered. This condition in puerperal fever calls for *Sulphur*.

A good point of differentiation between *Opium* and *Belladonna* is that the latter has excitability in direct relation to the congestion—the more congestion the more excitability; while with *Opium* it is “the more the congestion, the less the excitability.”

Meningitis often gives a perfect picture of *Opium*, and may include these marked symptoms:

Occiput as heavy as lead. *Opisthotonos*. Eyes fixed, half closed, glassy, staring. Pupils insensible, dilated or contracted. Twitching lips, flapping cheeks. Intense thirst, vomiting. Constipation or diarrhoea. Perspiration aggravates. (*Gelsemium*, better from perspiration.)

A dose of *Opium* high will act favorably for weeks in suitable cases of chronic alcoholism, as I have repeatedly found in my own practice, the remedy seemingly restoring to the patient control of the will. Long-standing chronic constipation is often cured with a very few doses of a high potency discreetly administered. A most serious case of Facial Erysipelas following acute suppurative *otitis media* demanded *Lachesis* by symptoms of early and violent delirium, which yielded very promptly to this remedy. Then *Opium* was strikingly indicated, and brought relief, but failed to clear the case, however, until a dose of *Psorinum* (also indicated) had been exhibited. Here was a condition marked by deeply-seated dyscrasia, which *Opium*, though a well-chosen remedy could not fully reach.

I have often felt the limitations of *Opium* in this respect. While a deep response may in some cases be secured, or while

the remedy arouses the organism to fuller expression of its real state, there is often in other cases a positive line of demarcation drawn, beyond which the power of the drug refuses to penetrate. Sometimes, then, Opium must be followed by a greater than itself, sometimes by a less profound medicine. A faithful reading of symptom totality is the only guide.

Of the bed symptoms, three subjective ones are sufficiently striking to be borne in mind:

Twitching fibrillae of muscles.

Cannot lift head from pillow (*Carbo veg.*)

Bed too hot to lie on—searches for a cool place.

The grand characteristics of Opium may be summed up as follows:

PAINLESSNESS. The conditions suggest pain, but none is felt nor found.

Deficient vital reaction to remedies. The well-chosen do not make an impression.

Patients with lax muscles and want of bodily irritability.

Complaints from *fright*. Even paralysis.

Sudden retrocession of acute exanthema results in paralysis of brain or convulsions. (*Zinc.*)

Stupor, stertor, coma. Deep stertor on both inspiration and expiration. Red face. Half-closed eyes.

Unsound sleep with auditory hyperaesthesia.

Hot sweat on upper half of body, lower hot and dry.

Peristaltic motion reversed or paralyzed.

APHASIA.

BY EDWARD FORNIAS, M. D., PHILADELPHIA, PA.

This condition consists in the diminution, abolition or perversion of the faculty of expressing ideas by conventional signs (speech, writing, gestures), or understanding these signs. These degrees of the trouble exist, without the disturbances of ideation or of the neuro-muscular apparatus, which subserve this expression, being able to explain them.

The faculty of language comprises two phases (Charcot)—One passive, which pre-supposes, for spoken language the

knowledge of particular sounds representing the signs of expression (auditory memory); for written language, the remembrance of graphic characters corresponding also to conventional signs (visual memory); and for the mimic, the memory of gestures, which have likewise an admitted meaning;—the other active, in which these partial memories enter into communication with the centres of co-ordination, which preside over the articulation of words or the writing of them, and which do not operate normally, unless two other partial memories, that of the motion of speech and that of the movements of writing are themselves intact. These memories are created by the storing up, in the cerebral substance, of sensations produced by the movements corresponding to either one or the other of these acts.

Each mode of language may be affected by a disturbance of either one of these phases, even when intelligence, articulation of words, and motion of hand retain a sufficient degree of integrity. In the active phase, it is the memory for spoken or written words and the faculty of understanding them, that is wanting; here there is aphasia from lack of auditory or visual perception (word-deafness or word-blindness.) In the passive phase, it is the relation between the centre of memory for words and the centre of expression which ceases to exist; there is then aphasia from default of transmission, either verbal or graphic. To the first, the name of motor aphasia is given, to the second, *agraphia*. Troubles of the power of expression by the use of signs or gestures is called *amimia*—*amnesic amimia*, when gestures can be made but their meaning cannot be remembered—*ataxic amimia*, when the power of making signs is entirely lost. They probably suggest the same consideration as the trouble of spoken or written language, but their character and seat of lesion are less known, because they have not been observed isolated, but only in the more or less complex conditions.

So as written language consists in the remembrance of graphic characters with a given meaning; spoken language is constituted by a combination of articulate sounds into different groups, to designate objects, properties, actions, &c., but languages do not employ all the sounds which can be produced by both larynx and the vocal tubes, between the glottis and the external apertures of the air passages, the combination of some with the others being often difficult. Those sounds which are

easy of combination enter, for the most part, into the formation of the greater number of languages. Each language contains a certain number of such sounds, but in no one are all brought together. On the contrary, different languages are characterized by the prevalence in them of certain classes of these sounds, while others are less frequent or altogether absent (Kirkes). It should be born in mind, likewise, that the tongue does not only play a subordinate, but a very important part in speech, for there is impairment of this faculty, whenever the tongue is removed by operation, and certainly loss of speech confined to those letters in the pronunciation of which this organ is concerned.

When the young brain centres have attained the necessary development to perceive impressions and dispatch impulses; either through instinct or instruction, a knowledge is acquired of the external objects which are constantly exciting those centres, and with an increase of this knowledge, we gradually attain the faculty of speech and gestures, and later on that of written language. It starts in this manner: If the attention of an infant is called, by showing him an orange, giving its name with precision and emphasis, the word (orange) and its articulation become then fixed to the exclusion of other sounds and motions, perceived and noticed at the time, and from that very moment, secondary dynamic associations, more or less stable, are formed in the third convolution (Ribot), or, in other terms, a motor-memory is created. So, we have the infant in possession of two orders of image-words, that is of two verbal memories; the image or auditive memory, and the image, or the memory of co-ordinated movements subserving articulation. In many persons these two memories constitute the whole cerebral luggage, destined to the function of language, but among the more civilized people, new processes of expression are added to the precedent;—these are reading and writing.

The operations which preside over the acquisition of these two modes of language, are of the same character as those of the verbal memories referred to above. When a child learns to read, the image of the letters produces, at first, an impression on the common visual centre (Marie). The child perceives the traits and lines, vague forms, which for him have as yet no meaning. For these traits and lines to acquire any sense, it is necessary to associate them, by habit, to certain sounds, and later to the sensorial images of the object designated by the

written word; thus, physiological connections are created; on the one hand, between the visual image of this word and the auditive memory; and on the other, between the same image and the other images called visual, tactile, olfactory and gustatory, which conjointly contribute to give the idea of the orange. (Ballet.)

With this knowledge on hand, I now proceed to the proper subject matter of this paper. Motor Aphasia is the most frequent trouble of speech and consists in the impossibility of expressing thoughts by words, due, as stated above, to the fact that the centre of verbal expression does no longer transmit words as in the normal state. The aphasic has no paralysis of the organs of articulation (muscles of the tongue and of the lips); his intelligence, now intact, now weakened, does not offer in each case, enough marked diminution to explain the trouble of the speech, and yet though of variable degree, this trouble is well evident. We rarely see cases where the impossibility of speech is absolute. As a rule, the aphasic can give utterance to a few syllables or words, but void of sense, not expressing his thoughts, not answering questions put to him, and which frequently are always repetitions of the same object. He thinks, however, that he expresses himself correctly and repeats incessantly an unique phrase, the same word, the same syllable, or the same exclamation. Others do not find nouns, employing paraphrases instead, or in place of them, or only pronouncing the half of each noun, or he forgets verbs, or malconstructs phrases (agrammatism, akataphrosia), or substitutes a word for another (paraphrasia). Still others repeat meaningless words addressed to them (echolalia). Some patients can read or sing, but not speak. Mimic language and the ability to write are retained, while speech is impossible, or all forms of expression are abolished at the same time. As a rule the patient is fully aware of the mistakes he makes, though he cannot avoid making them.

Motor aphasia announces always a cerebral lesion. Its seat is the posterior part of the third left frontal gyrus, usually termed Brocas's convolution. In the left-handed the lesion is right. Frequent association with right hemiplegia is the rule, but aphasia may occur independently of hemiplegia.

Agraphia, like motor aphasia, is due to default of transmission, graphic in the former, verbal in the latter, and both correspond to the passive phase of Charcot, given above. The

agraphic writes with difficulty or is unable to write at all. Some cannot write at all, though they can read and speak. Here the co-ordination of movements necessary to trace out or outline the letters has disappeared. Others can only write some given words or letters, which constantly recur or come back in the sentences they write, just as certain aphasics always repeat the same syllables or words. Still others make mistakes while writing, where it is not customary to make them, or their graphic expressions are reduced to illegible dashes of the pen. Sometimes they can copy or write what is dictated to them, or draw or trace figures or musical notes, but they are incapable of writing voluntarily. Agraphia denotes a lesion of the inferior part of the left second frontal convolution, a point very near, but still different from the one affected in motor aphasia. As agraphia, like motor aphasia, is almost always accompanied with right hemiplegia, one may well relate the paralysis of the arm with the abnormal state of the writing; but at first the paralysis is rarely very pronounced and besides the agraphic cannot write with either hand, while the right-hemiplegic, with the left hand can still trace a clumsy, though legible writing, answering the object well enough.

I pass now to the active phase of Charcot, where the aphasia is due to lack of auditory or visual perception. In the first case, known as word-deafness, in the second as word-blindness, and both under the name of sensory aphasia, which is always associated with more or less inability to remember the proper words (amnesia) and usually with impairment of the intelligence. The lesions of these troubles are seated, in word-deafness (auditory amnesia) in the upper end of the first temporo-sphenoidal convolution, (left), and in word-blindness (visual amnesia) in the angular gyrus (left).

In word-deafness there is inability to understand spoken language though the power of hearing is intact. The patient hears the words uttered, but perceives them as any sound whatever, not related to any subject or idea, and frequently cannot repeat them, although he understands them. Sometimes it is his own words that he cannot understand (psychical deafness), so that he has no conception of the incorrect manner in which he expresses himself, and of the employment of some words for others (paraphrasia). Musical sounds are sometimes perceived, at other times not. Word-deafness, however, comprises several types of derangements. Awkward word-deafness (sur-

dite verbale brute), is the lack of hearing for words, impossibility to repeat those uttered and retention of the articulated word; central word-deafness (*surdite verbale centrale*), with loss of perception for words and impossibility to repeat the words; mental word-deafness (*surdite verbale mentale*), with possibility to repeat the words without understanding them, or to understand them after being repeated; representative word-deafness (*surdite verbale representative*), with possibility of conceiving and pronouncing words correctly and impossibility of comprehending their meaning. (Charcot.)

Word-blindness (*Alexia*) like word-deafness, results from a default of reception, but visual not auditory. Writing is the motive. The patient cannot read written words, memory for graphic signs being totally or partially abolished; or he understands what he sees written or printed, but cannot read it aloud (*motor alexia*). Sometimes he does not recognize any letters or does recognize some; again, he may recognize all, but has no idea of the meaning of their combination. There may be loss of power to read printed or written words, or numbers, or music (*musical alexia*), while in other cases the inability to read is limited to one or two of these sorts of signs, the others remaining perceptible. Certain individuals succeed in reading by following the lines of letters with the fingers, others by reproducing or copying on paper the letters of any printed matter. Word-blindness is occasionally found associated with psychical blindness, the commemorative images of objects being lost, and almost always accompanied by right hemianopsia, sometimes by hemianesthesia. On the other hand the intelligence is usually intact, and hemiplegia is more rare in this than in any other form of aphasia.

Verbal blindness indicates a lesion seated in the posterior part of the left inferior parietal lobe, in the neighborhood of the supremarginal gyrus, which is often simultaneously affected, what explains the concomitant hemianopsia. But mind-blindness (*apraxia*) may be also described as a condition in which there is lack of a proper apprehension of the true nature of things, leading to the performance of preposterous acts; called also object-blindness and soul-blindness, which although it may be found associated with word-blindness, it has nothing in common with this condition, when the intelligence usually remains intact.

In general, an inability to read understandingly, if due to a

central lesion has been called dyslexia. The same name is applied to a condition where reading is possible, but is attended by disagreeable sensations.

As to the diagnostic value of aphasia I may state that the trouble of speech and writing may be found separated, but more frequently associated in the same individual, explaining the proximity of the parts affected by the lesion, which we know exists, except in the left-handed, always in the left side, and may be located in a limited space corresponding to the second and third frontal convolutions, to the first temporal and to the inferior parietal lobe. As to the nature of this lesion, it is, in a great number of cases a softening, frequently still a cerebral tumor, principally syphilitic (Fournier), more rarely a small hemorrhage. Aphasia may occasionally be due to functional derangements, as from overwork or great excitement. It has been observed in the course of typhoid fever, variola, cholera, yellow fever, puerperal infection, migraine (Charcot). Whenever a patient is attacked by right hemiplegia, less pronounced at the face, more accentuated in the upper than in the lower extremity and the speech becomes disordered, we should think first of softening of the brain; next to a cerebral tumor. In both cases, the troubles of spoken and written languages, separated or associated, may persist indefinitely without appreciable change. Sometimes they disappear gradually, the patient recovering the power to pronounce phrases more and more comprehensible and to write more and more distinctly every day (Grasset). Improvement of speech may occur, even in organic lesions from education of the sound hemisphere, and cases have been recorded, and I shall refer further on to one, in which the patient had learned over again to speak, as a child learns. Aphasia must be distinguished from mental incapacity or absence of ideas or from defects in the apparatus of articulation (anarthria). In the event of absence or defect of speech in a child who has already learned to talk, the physician must determine whether it is due to purely mental causes, to a localized lesion of the brain and true aphasia, or to peripheral lesion affecting the course of the receptive or productive routes for speech (Elder and Fowler); bearing always in mind that disorders of speech occur with lesions of the right as well as of the left hemisphere, and that aphasia, at this time of life, is comparatively readily recovered from. These peculiarities are to be explained upon the ground that the left

half of the cerebrum has not acquired predominance over the right; that is, that both are being employed in the acquirement of speech. Consequently as Elder and Fowler so well assert, should one centre or set of centres be incapacitated, it is easy for the opposite set to take on their functions. One of the occasional congenital defects of childhood, given by Dr. Robert Hutchison, is congenital aphasia, a condition which he himself thinks so uncommon as to be scarcely worth considering. Aphasia in children, may be motor, due to embolism of the left middle cerebral artery, and be associated with right hemiplegia, or a tubercular tumor may compress the left third frontal convolution (Ashby and Wright), but usually it is functional or toxic and occurs during the convalescence of exhausting fevers, as typhoid, where many months may elapse before the child can speak correctly. It has also been observed in nephritis, pneumonia and whooping cough.

Again, the power of speech in children, is lost suddenly at times in consequence of a nervous breakdown, and Dr. Langdon Down records the cases of two brothers, who had spoken well and understood two languages, completely losing the power of speech at the period of the second dentition.

The most complex combinations of speech defects I have been able to observe are the following: 1. A lad, 7 years old, was seized by a single convulsion at the eruption of a molar, during the second dentition, which was followed by a slight hemiplegia (right) and utter perversion of the faculty of speech. Repeated earache, rupture of the drum-head, and a persistent, purulent otorrhæa finally put an end to the trouble, which no doubt was partially or totally due to a mastoid abscess. He received especial treatment, and Bell., Calc., Graph., Hepar, and Sulph. as auxiliaries. 2. A colored man, 65 years old, bricklayer, fell and had right hemiplegia, inability to talk and ineffectual efforts to connect ideas. The efforts to speak were spasmodic and terminated unsuccessfully in a forced laughter and pathetic stammering. Stram, 30, certainly gave him great relief, but death carried him off at the end of two months. 3. A lady, 71 years old, married, both amnesic and agraphic, had occasional attacks of physical exhaustion and irritability of temper, followed by psychic depression and impairment of the intellect. She became then abusive, unreasonable, obscene, claiming double personality, and conceiving and committing many ridiculous actions, which were well

adapted to their purpose. She could not even remember the number of her home; and a careful observation revealed notable gaps in her memory, for during these paroxysms she had not the least recollection of many eventful periods of her life. She was also unable to write without omitting words or syllables, in fact, there were times in which memory for graphic signs was totally abolished. She suffered for years from tremor of the head, which became aggravated during the attacks, but no history of epilepsy to explain the amnesia. Some months before her death gradually lost power of the lower limbs, and frequently fell upon her buttocks, to remain for hours in that position, which she would not change by any help and command, but by her own free will, and with picked out assistance. The interesting feature of this case, is that paraplegia and not hemiplegia was the concomitant. Special treatment, and Agaric., Nux. V., Kali Brom., Lycop, Sulph., &c., were administered, without results. 4. A boy, aged 9, had middle-ear disease, following scarlatina, which brought about word-deafness. It was a true case of "surdite verbale centrale," as there was loss of perception for words and impossibility to repeat them, which lasted two years, and gradually improved and got well under special treatment and the administration of Hyos., Caust., Coccul., Laches, and Sulph. 5. S. M., aged 19, Cuban by birth, had tubercular meningitis. The aphasia appeared with the right hemiplegia, after the period of remission and during the return of the fever, as it always happens in such cases. I made no comments on the fact that this patient and friend had been treated for typhoid fever by the old-school. I limit myself to state that it was touchingly painful to contemplate the emaciated and helpless frame of this young man, in the attitude of apparent meditation, and making useless efforts to only utter incomplete phrases to inquire about his absent parents. He was at no time under my care, but I was a daily observer of the case. After about three months of suffering he died on the sea, returning to Cuba, under the care of his father. 6. J. P., aged 58, Cuban, syphilitic, polyglot (Spanish, French, Italian, Portuguese, English and German), both aphasic and agraphic. This is the most interesting case that has come to my knowledge and observation, for the aphasia was not limited to one language, but to all, with the exception of the Portuguese, which was the last he learned. In 1864 I left him in Germany, healthy and strong; some years after was in busi-

ness at Rio Janeiro, where he contracted syphilis. In 1900 I met him in Paris, retired from business, suffering occasionally from epileptiform convulsions, and then he informed me of his long illness and that he had been learning over again the lost knowledge of languages. His success in obtaining this was undoubtedly great, for, at least, I found his Spanish, French, German and English very correct. He was in the United States last summer, visited me on his way to the St. Louis Exhibition, and I found him robust and happy. He returned to Paris in August and died suddenly on the 7th of November last. He was treated by Dr. Fournier, of Paris.

The treatment of this affection will depend upon the cause. Recovery may occur spontaneously. Improvement of speech may also take place, even in organic lesions, from education of the sound hemisphere. The case of the polyglot conclusively shows that a patient can learn over again to speak, as a child learns. The slow process of educating the sound hemisphere, **however**, must be aided by mental and bodily rest and proper nourishment, and we certainly will be surprised at the wonderful action of some of our remedies. If aphasia is due to hemorrhage, improvement may take place as clot is absorbed, but when to local softening after embolism, no treatment is effectual. In cases dependent upon syphilis, Kali Iod. is the leading remedy. For simple nervous trouble, bell., cham., stram., lycop. and stilling have been given with success. When attended with trembling of the tongue, you may select among ars., euphr., ignat., lycop. and laches; with efforts to find the right word, bell., selen; with inability to express the right word, anac., arg. nit., merc., stram., puls.; with stammering, stram., cham., opi.; with agraphia, lycop., laches., cham., china, graph., hepar., ignat., nux. v.; with forgetfulness, alum., anac., bell., bovis., coccul., phos. acid., platin; with awkwardness in talking, amm. carb., nat. mur., sepia, sulph. acid., with awkwardness, in writing, bovista.; forgets names, anac., oleand., sulph. Other remedies recommended are: Calc. c., cann. ind., caust, coni, hyos., nat. mur., nux. v., onant, croc., oleand, opi., plumb., rhus. tox., zinc. Dr. Farrington recommends bothrops. lanceolatus, one of the ophidia. Cases reported in France were benefitted by bell. and stram., in cerebral disease, and favorable mention is made of glono., coni., kali brom., caust., and coccul. lycop., however, seem to have the best

record, and there is no doubt that it meets admirably some cases of motor aphasia, with and without agraphia.

As special remedies we should study: Makes mistakes in talking, cham., bovis., nat. mur., amm. carb., calc. c., caust, china., coccul., con., graph., hepar., kali c., lycop. mang., merc., sepia, sulph; after injury in the head, Arn.; makes mistakes in writing, lycop., lach., crot. tig., nux. v., amm. carb., bovis., cann. sat., cham., china., graph., hep., ignat., nat. c., nat. m., rhodo., sepia., sulph.; both in talking and writing, amm. carb., lye, sulph., bovis., lil. tigr., nat. m., cham., china., graph., ign., nux. v., Otherwise the treatment is that of hemiplegia, which so often accompanies aphasia.

PROTRACTED LABORS: PREVENTIVE MEASURES.

BY LEWIS K. WOODWARD, M. D., WESTMINSTER, MD.

(Read before the Maryland State Hom. Med. Society, May, 1905.)

I HAVE selected a simple, everyday subject, knowing that in this age of big things the commonplace are slighted and often entirely overlooked. This is so not only in the business affairs of life, but equally true in the realm of medicine, surgery and obstetrics. Then, too, my age and experience would naturally not permit me to have gathered much original data concerning the less frequent and more serious complications encountered in practicing the obstetric art. Probably a paper on the latest theories as to the cause of that rather obscure condition, eclampsia, or new remedies in the treatment of that terrifying complication, postpartum hemorrhage, would have been more interesting and appropriate for my audience, but I have preferred instead to tell you briefly of a few measures which I have found beneficial in the preventive treatment of a state of affairs with which we have all met. That is, except those who have confined their work to some other specialty.

Labor is divided into stages, which might be termed (1) stage of dilatation, (2) stage of foetal expulsion, (3) stage of placental expulsion. To these can be added a (4) stage of despair, which is a part, I think I can safely say, of the majority of labors. I need not describe the 4th stage, we have a

picture of it indelibly impressed upon our memories. This state of discouragement is often present when the labor is progressing as rapidly as it should, but frequently the patient's gloom is in keeping with the actual condition.

This would cause us to ask,—when does labor become abnormally prolonged, or what is a protracted labor, and what are the causes? To the first part of the question it is difficult to give a satisfactory answer and definition, because the line between labors, normal and abnormal as to time, cannot be sharply drawn. The process may require a long time and still be normal, especially in primiparae. The best short and plain answer that I can give is,—that labor is protracted when there is not a gradual and continuous progress of the process until complete expulsion of the uterine contents. The causes may be divided into two general classes,—(1) insufficiency of the expelling forces, and (2) obstruction. It is to the former that I desire to refer, as when the latter exists instrumental delivery is generally required. I will speak only of simpler measures, which can be employed when one is alone and with safety. Nearly all cases resulting from the first class are due to uterine inertia, a decrease in the contractility of the muscular fibres of the uterus. This sluggish state of the organ is often present when the cause of delay is attributed to obstruction, as in “rigid os,” which I believe rarely exists per se. If the vis a tergo is normal such resistance will be overcome. With this brief and perhaps imperfect statement as to causes we arrive at treatment. I will ask you to consider particularly measures which are to be used when the condition becomes imminent. Of the purely prophylactic measures may be mentioned proper diet and hygiene, which should be insisted upon as soon as you are consulted by the prospective mother. Too much is usually taken for granted, the doctor thinking that the woman will of course not eat excessively of nitrogenous food, will take the proper amount of exercise in the open air, and see that the bowels and urine are as they should be. Strict attention to these matters will have a beneficial influence on parturition.

As soon as called to a case of confinement make inquiry about the bowels and if there has not been a free evacuation within several hours, order a large enema; repeat if the result is not satisfactory. It is good practice in all cases. See if the bladder is distended even if the patient is urinating every few minutes, which is frequently a symptom of retention, and

catheterize if necessary. Allow the woman to be out of bed during the greater part of the first stage, and have her withhold voluntary effort until dilatation is complete, or nearly so, when the assistance of the abdominal muscles will be more needed and effective. The hot douche is generally useful on account of its relaxing effect and will stimulate the pains to a slight degree, but has the disadvantage of removing the natural secretions of the vagina, which act as a lubricant.

As long as the cervix dilates gradually and other conditions are favorable, do nothing. I have little respect for the man who in order to save his own time, to make a "grand-stand play," or to get a larger fee, applies forceps, performs version, or even a dilatation, when the case is progressing normally. But just as culpable is the accoucheur who turns everything over to nature and withholds assistance, when the interests of the child and mother demand it. Lusk says,—“Many fair lives are needlessly squandered because of excessive timidity begotten of imperfect obstetric teachings.” I would modify it by saying that many foetal lives are sacrificed and many maternal lives jeopardized by timid obstetric practice.

As soon as it becomes apparent that the pains, the force, not the suffering, are not accomplishing what they should there is a medicinal agent, the use of which I believe is a positive factor in relieving the inert state of the uterus, by stimulating its muscular and nerve fibres to greater activity. Quinine is the drug. It must be given in material, decided doses, from 10 to 16 grains of the sulphate or hydrochlorate, according to the degree of inertia. It seems to produce quicker and better results when given in an initial dose of 5 to 8 grs., and followed by the same amount in two doses at intervals of 15 to 30 minutes. We are after a physiological and not a curative action, so large doses are necessary. I have never seen nor heard of unpleasant effects. Its action is prompt, being noticeable in one half hour, and lasting, thereby lessening the danger of postpartum hemorrhage and severe after pains. Quinine will not originate uterine contractions and is therefore not an abortifacient, “nor does it cause tetanic contractions, but merely increases the strength of labor pains, allowing complete relaxation between them.” (Owen Mackness, *Edinburgh Med. Journal*, May, '98.) It is the only medicine which I have found of positive and dependable value and safety as an oxytotic. The use of ergot as an ecbohic has lost a great deal of

its popularity on account of the serious complications and bad effects, even death of the foetus, which have resulted therefrom. The trend of opinion seems to be that it should not be administered until the completion of the third stage.

Another measure tending to prevent protracted labor by stimulating contraction of the uterus, is chloroform by inhalation. Do not confound its employment here with its use as an anesthetic, often called for in midwifery. Have the patient inhale it for several minutes from cotton on which has been sprinkled a few drops, and you will note more effectual pains. It is of special utility near the end of the first stage. If necessary continue its use at intervals before the pains for half an hour or more, noticing its effect upon dilatation and descent of the head; if not satisfactory or if deemed advisable for other reasons, it can readily be pushed to anesthesia and the child delivered with forceps. But before deciding to take so serious a step, rupture the membranes if they are still intact, and I think that you will often be surprised at the change that will take place. I have frequently found near the end of the first stage, when dilatation is almost or quite complete, that the pains though hard have little or no effect upon the advancement of the head. On several occasions after having waited an hour or more with no improvement I have seen the labor rapidly terminated as soon as the amniotic fluid, which had become a hindrance, was allowed to escape. The head will be the better dilating body, particularly if hydramnios is present, when this interference is to be made earlier than otherwise. Always rupture the membranes during the height of a pain on account of danger of prolapse of the cord.

It is at this time that the abdominal muscles should be brought into play, encourage the woman to use them, and have some one assist her by letting her make traction on their arms. During the second stage expulsion may sometimes be facilitated by pressure on the breech. It is a simple measure and worthy of trial.

For prolonged third stage the method of Crede, with which you are all familiar, will, in most cases, bring about the delivery of the placenta. I have never seen a case of retained placenta when quinine has been used previously, which is an argument for its efficacy and prolonged action.

I have made no reference to forcible dilatation, which is often necessary when quick delivery is desired, but I believe that it

will be seldom required in these cases of protracted labor if methods tending to intensify the force of uterine contractions are employed. It is my opinion too that the use of forceps will be restricted to a different, more serious class of cases, if the woman's muscle and not ours is assisted in supplying the needed power.

These simple measures which I have found serviceable in my short obstetric career I commend to you as being applicable, effective and safe in cases which would be unduly prolonged by this anomaly of the expellent force. I trust that you who have tried them can corroborate my statements in part at least, and those who have not will do so, especially the use of quinine and inhalations of chloroform, and early rupture of the membranes. Let us do everything that is expedient to make the woman's ordeal as short and bearable as possible. Our doing so will not only help her, but may have an indirect influence in aiding the present crusade against race suicide, particularly among that class which prevents conception or destroys its product because of the length and severity of childbirth.

THE ARTIFICIALLY INDUCED MENOPAUSE.

BY HOMER I. OSTROM, M. D., NEW YORK.

By the artificially induced menopause I understand the arrest of menstruation that is brought about by removing the ovaries, for while ovulation may take place without menstruation, menstruation cannot take place in the absence of functionally active ovarian tissue. I exclude the flow of blood that occasionally follows within a few days, a complete double oophorectomy. We all have met with such instances, and in the early days of abdominal surgery they caused some apprehension as to the thoroughness of the ablation. They receive their explanation however in the habit of the uterus, which being strongly stamped by the ovaries, is not at once lost upon their removal. This habit of decidual formation may even recur during a variable period, but in that event it is accompanied with the physical and psychical phenomena of the menopause, that have been induced by arresting the function of the ovaries.

Menstruation is a series of complex changes in the uterus, that complete the cycle of an unimpregnated ovum. Without ovulation these changes are not instituted, and with the impregnated ovum the process does not proceed beyond the formation of a *decidua menstrualis*; the period during which blood is discharged from the endometrium is not reached.

It has been maintained that because ovulation is known to have occurred before the establishment of menstruation, as evinced by the occasional macroscopic appearance of the ovaries prior to puberty; and because pregnancy has been known to take place in girls who have not menstruated, and also because pregnancy has occurred after the amenorrhea of the menopause, that there is only a casual relation between the discharge of a ripe ovum into the uterus, and menstruation, but these exceptions will not weigh against the fact that menstruation marks the woman capable of race reproduction, and continues periodically through sexual life save when the uterus contains a fecundated ovum. That some Graafian follicles rupture, and their ova escape into the abdominal cavity, and that ovulation continues during pregnancy, seems probable, but such vagrant eggs, missing the Fallopian tubes, are powerless to set in motion the processes that result in decidual formation. Our deduction therefore is, that ovulation *per se*, that is, the rupture of a Graafian follicle, and the discharge of its ovum, cannot induce menstruation. Only after the egg enters the Fallopian tube are the changes in the uterus initiated that culminate either in gestation, or in menstruation.

The influences that make for a periodic recurrence of menstruation are probably but indirectly connected with ovulation, inasmuch as ova may be discharged at any time. The cerebro-spinal system, a characteristic of which is rhythmical action, through its menstrual plexus, may be secondarily responsible for the phenomena. We now touch upon the glandular function of the ovaries, the secretion of these organs accumulating locally, or being diffused through the system, suffers a rhythmic crisis, the manifestation of which is, seizure of an ovum by the Fallopian tube. Therefore the essential element that immediately provokes the reproductive cycle, is the secretion of the ovaries, the *liquor folliculi*. It is probable that after an ovary matures, no new ova are formed from the germinal cells, and that until the cessation of ovulation there is a continuous maturing and casting off of eggs. The process involves an in-

crease in the quantity of fluid in the Graafian follicles, which fluid may be absorbed before the rupture of the follicle, or after its rupture, by means of the peritoneum. This fluid, which possesses the essential potency of sex, accumulating, acts upon the uterus, causing its rhythmic and periodic changes. It also maintains the characteristics of sex that mark the sexually mature woman.

The physical and psychical phenomena that attend the menopause are brought about by a gradual folding up of the secreting function of the ovaries. The cessation of ovulation, the discontinuance of the maturing and casting off of mature ova, cannot reasonably be thought to bear an intimate relation to preserving physical equilibrium, for the ova are incomplete in function until impregnated, and when dropped into the peritoneal cavity are quickly digested by the peritoneal fluid. The *liquor folliculi* is the true secretion of the ovary, and upon its quality and quantity depend the preservation of the characteristics that mark the period of sexual vigor. This is shown by the fact that as long as even a small portion of a vitalized ovary remains anywhere in the abdominal cavity, the menopause, exclusive of menstruation, is delayed until the natural period, when the transplanted gland ceases to functionate, and the climacteric is reached. If a transplanted ovary is so situated that ovulation can take place, and the ripe ova can be drawn into the Fallopian tube—to accomplish this it is not necessary for the fimbriated end of the tube to come in actual contact with the ovary—menstruation is not interfered with, and impregnation may occur, otherwise this function will cease, but the sexual phenomena, psychical and physical that characterize the period of reproduction, and that depend upon the ovarian secretion, will continue unimpaired. Therefore as far as the well-being of the individual is concerned, the secretion of the ovary, what may be termed its internal secretion in contradistinction to ovulation, or its external secretion, assumes to the individual a vastly more important relation than the process of ova forming, which concerns principally, if not wholly, race preservation.

From the conception of the ovary as a secreting organ, one that in addition to maturing ova, prepares and elaborates a material that is essential to the health of the system during the continuance of reproductive life, it is apparent that the removal of the ovaries will bring about more changes than those

of sterility, and that total ablation should never be performed unless the condition of the organs demands such a mutilation.

I am here constrained to say, lest this position should seem contradictory of former statements, that I have little confidence in the permanent benefits to be derived from what is generally understood to be conservative surgery of the ovaries—the removal of part of an ovary in the hope that the remaining portion is not diseased, or if so, will thereby regain its health. I have noted too many cases of ultimate failure to be willing to trust to such methods of treatment. My experience teaches me that but very few ovaries sufficiently diseased to require operative interference, are not wholly diseased. Such cases are for the most part cystic ovaries; ovaries in which the Graafian follicles have not ruptured, and have become unduly distended with *liquor folliculi*; or having ruptured and discharged their ova, close, and through illy regulated activity, continue to secrete. There is no reason, either theoretical or practical for believing that the processes which make the cystic ovary are confined to the superficial follicles, and there is every reason to believe that as fast as the Graafian follicles mature on the surface they are replaced by others from the deeper structures of the ovary, and further that the same erratic forces that induce pathological changes on the surface, are equally active beneath.

This fact is the weak point in the operation that has for its object decapsulation of the ovary, with the use of Cargile membrane to prevent adhesions while a new capsule is forming. The procedure has only recently been proposed; too recently to furnish trustworthy clinical data, but I cannot look upon it as more than a temporary expedient. For a brief period after removing the dense fibrous capsule there is relief from the pressure symptoms caused by inability of the Graafian follicle to rupture, but the operation does not touch the stroma of the ovary which is equally dense, and soon the superficial structures are as resisting as before, and the same conditions exist as prior to decapsulation.

Nor do I believe that a permanent cure is to be anticipated from conservative surgery of the ovaries as usually practiced, that is, the removal of a portion of the ovary. In the majority of cases so treated the abdomen must be reopened in from one to two years, and the entire organ removed to effect a cure.

The desire to save, not as much as possible, but a small por-

tion of the ovary *transplanted with the sole intention of continuing its secretion*, presents slightly different propositions. In one case the danger is considerable of overlooking disease in our zeal to conserve tissue, in the other it is sought to retain only enough of the gland to continue its function of secretion, without regard to that of reproduction.

In this connection it is interesting to note that it makes little difference where in the abdomen the transplanted piece of ovary is situated. As long as its relations with the vascular system are maintained, the ovary functionates, and the system preserves the characteristics that depend upon the absorption of its secretion.

The condition of an ovary may be such as to require complete amputation, that is, removal from its anatomical relations. But such an ovary when subjected to careful *extra-abdominal examination* may be found healthy in a limited area. Such a portion may then be excised, and transplanted under the peritoneum, with the reasonable assurance that its secreting function will continue, and that thereby the system will not suffer from having that withdrawn.

The artificially induced menopause, not as classically recognized by the cessation of menstruation, but more especially with reference to the profounder effects that follow the removal of the ovaries, should when possible be prevented, by leaving a portion of the ovary in the abdominal cavity, to continue its secretion. This differs radically, as I have shown, from the conservative surgery of the ovaries, that seeks to maintain ovulation and to preserve fertility. Such I believe to be of doubtful use, and to frequently necessitate a second operation to complete the cure.

The operation that I have performed, and it is recognized that the condition of the adnexa may be such as to render its adoption impossible, is, when disease makes total ablation of an ovary necessary, to examine that organ carefully *after its removal from the abdomen*, and if possible, to transplant, under the peritoneum, any portion of the gland that is above suspicion. This may be done in the fundus of the uterus, or preferably beneath the peritoneal covering of the broad ligament where the areolar structures are abundant, and where in consequence a foreign body will more readily establish vascular relations. Experimentally the ovaries of rabbits and dogs have been fastened between the peritoneal folds of the mes-

sentary with the result that when the transplanted gland continued to grow, the normal characteristics of the breasts, uterus and genitals were retained.

The technique followed in three cases in which I have adopted this treatment, is extremely simple. The amputated ovary is at once placed in a sterilized towel wrung out of warm salt solution, where it remains until the pedicle is secured. The ovary is then carefully examined, and any portion of it that is healthy excised, and stripped of its peritoneal covering. The patient being in the Trendelenburg position, the broad ligament is drawn up, and the peritoneal covering on its posterior aspect as near the blood supply of the ovarian ligament as possible, excised to an extent sufficient to introduce the ovarian fragment. By gently lifting the peritoneal fold, care being taken to avoid rupturing the vascular channels, an extra peritoneal couch is made, on which is placed the fragment of ovary. The operation is completed by sewing the peritoneum together, for it is not necessary to otherwise secure the transplanted tissue.

I have had no opportunity to examine the surgical results of this conservative operation, but the clinical results have been most satisfactory. The object of preventing the physical and psychical changes that usually attend an artificially induced menopause, has been attained in each instance, the only change observed, being in two cases the abrupt cessation of menstruation, while in the third case menstruation recurred irregularly for several months, and then ceased, an instance of the continued rhythmical habit of the uterus.

These three cases in which a portion of the ovary was transplanted with the sole object of providing for a continuance of ovarian secretion, are too few in number to serve as more than an indication, or suggestion for treatment, but inasmuch as no increased danger attends the additional manipulation, nor does it retard convalescence, it is well worth a trial in view of the profound systemic disturbances that may thereby be avoided.

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, M. D., BALTIMORE, MARYLAND.

Belladonna.—(Continued.)

We have, in the preceding lectures, given a thorough resume of the Allopathic uses of belladonna. This morning we will study the homœopathic therapeutic uses of belladonna. It will be more convenient to study this action in groups. First, then, the *cephalic group*.

From the various provings, as collected in Allen's Encyclopedia of Materia Medica, the most characteristic are:

Pressure in the brain, with sopor and vomiting; headache, especially in the forepart of the head, worse during motion and when stooping; continuous and forcible dilatation of the whole brain, sensation as if the sutures of the skull were pressed asunder; feeling in the head as if a lever were applied for the purpose of breaking it asunder; headache above the orbits as though the brain would be pressed out, obliging him to keep his eyes closed, with contraction of the pupils; pressure in the head, extending over a large surface; sensation in the forehead as though the brain were ascending and descending; pain as if the head were screwed together from side to side; violent throbbing pain in the forehead, as if the bone were raised; throbbing from before backward, externally the throbbing terminates in stitches; we have also painful pressure in the head, especially in the lower part of the forehead, directly above the nose, intolerable on stepping or walking; stabbing pain, as if with a knife from one temple to the other; sharp, cutting pain on the right side of the head, from the frontal to the occipital region, becoming general and at last settling in the right parietal bone. The head feels heavy as from intoxication; vertigo, when stooping or rising from a stooping posture; vertigo, with vanishing of sight; throbbing and beating in the head and carotids.

These symptoms indicate belladonna in headache of a *congestive*, nervous, rheumatic or catarrhal form. The headache of belladonna is frequently right-sided; it is usually very violent and the symptoms of congestion to the brain are well-marked; vertigo, stupefaction and partial loss of sight are frequent concomitants. Useful in headaches from exposure to the heat of the sun. The attacks are apt to come on or to get much worse in the middle of the afternoon and to last until to-

ward morning. Aggravations from noise, light, walking, jarring, motion of the eyes, touch, stooping, lying down, heat of bed. Ameliorations from quiet, sitting in the chair, dark-room, strong pressure on the forehead.

Belladonna is a prominent remedy in the treatment of vertigo. It is called for when the vertigo is attended with nausea, as is experienced when turning quickly around in a circle or when waking from a morning sleep, after spending a night in revelry; dullness of mind; luminous vibrations before the eyes, loss of consciousness, falling; vanishing of sight; tendency to fall backward or to the left side; relieved in the open air, aggravated in the room.

Apoplexy.—In some cases of poisoning, belladonna has caused great slowness and fullness of the pulse, or else a contracted, hurried and intermitting pulse; some patients have lost their consciousness, with sudden falling down, and paralysis of the lower extremities. Belladonna causes dilation and insensibility of the pupils; bloating and glowing redness of the face, purple spots in the face, protrusion and injected condition of the eyeballs; deep, stertorous, rattling breathing, burning heat of the skin; in short, a group of symptoms which are eminently characteristic of apoplexy.

Congestion of the Brain.—All the prominent symptoms in a case of poisoning by belladonna show that sanguineous engorgement of the cerebral vessels is one of the most marked effects of this drug. The face looks bloated, red; the carotids throb violently; the jugulars are swollen; the skin is burning and dry; the patient lies in a state of sopor, from which he wakes every now and then with a start; the eyes look blood-shot and seem to protrude from their sockets; the pupils are excessively contracted, or this excessive contraction may alternate with extreme dilatation. No agent corresponds with such a group of symptoms more accurately than belladonna.

In *Inflammation of the Brain* belladonna is one of the main supports of the homœopathic physician. It is indicated by the *pains*, tearing, lancinating, throbbing and deep-seated aching pains; by the signs of *vascular engorgement*, swelling of the head and face, burning redness of the face, protrusion and congested appearance of the eyes, purple spots in the face, heat of the head, throbbing of the carotids and temporal arteries; by the *fever*, pulse full, hard and tense, skin burning and dry, excessive thirst during the moments of consciousness; by the *delir-*

ium, which is generally of the violent kind, the patients howl, kick, tear and strike about with an extraordinary power of resistance; by the *condition of pupils*; they are contracted and exceedingly sensitive to the light; by the consensual phenomena and phenomena of the ganglionic system, such as deafness and blindness, or excessive sensitiveness to noise, sudden changes of color in the face from red to pale, starting of the extremities and subsultus tendinum, sopor, and lastly by the character of the secretions; the urine looks red and the bowels are constipated.

Belladonna affects the brain and nervous system generally in a precisely similar manner, hence the remarkable control which belladonna has over inflammation of the brain in all curable cases where these phenomena constitute characteristic indications.

Mania-a-Potu.—The homœopathicity of belladonna to some forms of this disease is self-evident. The patients fancy themselves assailed by robbers, or threatened by mice, rats, cats and other forms of animals from which they endeavor to escape. The delirium is of a furious kind, pulse full, hard and bounding; face bloated and red, or with purple spots; eyes glistening and staring, at times gorged with blood. Such patients are troubled with all sorts of hallucinations; they imagine that somebody is calling them. Trembling of the extremities is a common symptom; the urine looks red, the feces have a dark and burnt appearance, and the skin, although warm, yet may be drenched with sweat.

The principal indications for belladonna in this disease are the character of the delirium, and the signs of cerebral congestion which are undoubtedly present in mania-a-potu.

Typhus.—The homœopathicity of belladonna to typhus is substantiated by a number of symptoms characterizing the action of belladonna upon the cerebral tissues. In all forms of typhus to which belladonna is homœopathic, the cerebral symptoms are most marked. No matter in what organ or tissues the inflammatory process first manifested itself, belladonna may be used in any form of typhus where the delirium and the typhoid symptoms generally are strictly analogous to those which belladonna is capable of causing. These are:

Pains in the head, such as may be occasioned by belladonna, particularly a violent beating in the head; distress as if the skull-cap would fly off; feeling of heat in the head. Express-

sion of distress and suffering in the countenance. Glistening and staring, also blood-shot eyes, also with spasmodic rolling of the eyeballs upward or laterally, and alternate contraction and dilatation of the pupils. Thickness and heaviness of the tongue, almost amounting to paralysis, so that the patient is only able to utter inarticulate sounds; the tongue looks and feels like scorched leather, is covered with a thick, glazed brown or blackish-looking coating, unquenchable thirst, sometimes attended with spasmodic constriction of the throat and intense burning in fauces, so that the least attempt to swallow a drop of liquid causes suffocating spasms of the throat and general tetanic convulsions. Typhomania, alternate coma and delirium which is at times bland, at others furious; the patient can hardly be held in his bed, he wants to get away, strikes about, uses profane language, etc. Optical phantasms and hallucinations, which will be described in the optical group, picking at the bed-clothes and catching at flocks.

In the first stage of typhus the pulse may be undulating and soft, but somewhat accelerated. As the disease progresses, the pulse increases in frequency, becomes smaller and more compressible. When the paralytic stage is approaching, the contents of the bowels and bladder pass off involuntarily, and the skin becomes covered with a clammy sweat. Belladonna may be indicated even in this stage for our provings and the effects of poisonous doses show that this agent causes a paralytic relaxation of the sphincters, dryness, brittleness and increased warmth of the skin, with partial clammy sweats, and a hurried, feeble, vibratory pulse.

NERVOUS GROUP.

The action of belladonna upon the ganglionic system is marked by the most extraordinary phenomena. We may consider it under the different heads of neuralgia, rheumatism, spasms and convulsions, and paralysis.

Many of the symptoms obtained by the provers of belladonna point to its power of causing neuralgia of various nervous centres or ramifications. In neuralgia of the nerves of the face, belladonna has proved an eminently useful agent. We have swelling and inflammation of one side, or of the whole face; burning, creeping, cutting, tearing, drawing, lancinating and stinging pains in the face; these pains may be accompanied by irritation and inflammation of the eyeballs, headache, etc.

The rheumatic pains, which belladonna is capable of exciting, are of various kinds, such as painful swelling and stiffness in the nape of the neck. Lameness of the upper limbs, or lameness and pressure of the arms, with weakness, creeping along the extremities, as from a fly crawling over them, also with innumerable stitches. Cutting pains along the bones in the extremities, also with tingling. Pain in the long bones as if bruised, and as if they would crumble like decaying wood; the pain is a fine, stinging and gnawing pain in the long bones, and sometimes accompanied by violent tearing in the joints. Drawing, cutting, tearing pains, either in the joints or along the long bones or phalangeal bones.

The *convulsions* of belladonna are generally accompanied by peculiar distinguishing phenomena, as may be seen from the following series:

Convulsions which are renewed by the least contact, with hiccough, weariness and anxiety. Convulsions, with screams and loss of consciousness. Convulsions, with delirium and laughter. Convulsions, with rolling of the eyeballs. Convulsions, with startings of the hands and feet, with insensibility and rattling breathing. Convulsions alternating with complete immobility. Tetanic spasms, opisthotonos, spasmodic inclination of the head and body to the left side. Hysteric convulsions, with risus sardonicus, heat of the head, sudden changes of color in the face. Convulsions of the abdominal muscles in hysteria. Paroxysms of rigidity and immobility of all the limbs or of a single limb only, sometimes accompanied with insensibility, distention of the cutaneous veins, red and puffed face, full and quick pulse, and profuse sweat. Epileptic spasms. Convulsions from teething, with gritting of the teeth. In *puerperal convulsions*, belladonna may prove eminently useful if the existence of cerebral congestions, bloating and redness of the face, protrusion and suffusion of the eyeballs, dilatation and insensibility of the pupils, sometimes alternating with extreme contraction, coldness of the hands and feet, and a small, jerking, hurried and perhaps intermitting pulse, justify the use of the drug.

Belladonna has always been considered a sort of specific for hydrophobia. No known drug has the power of simulating hydrophobia to the same extent as belladonna.

From numerous cases of poisoning we know that belladonna may cause paralysis of the lower extremities. The paralysis

may be complicated with excessive trembling of the limb; or the patient may complain of a feeling of chilliness in the limb, with sharp pains in the affected part; or the limb may feel numb, cold and the pulse may be weak, empty, hurried and intermitting.

We may therefore find belladonna indicated in *paralysis after apoplexy*, either of one side or both sides of the body, or *partial paralysis* of one extremity or of one side of the face, or of the organs of speech. The pulse which indicates belladonna in this disease may be slow and full, but not hard or bounding; generally it will be found, small, hurried, weak or perhaps somewhat jerking and inclining to intermit. The paralysis may be complicated with symptoms of cerebral derangement, vertigo as if the patient were turning in a circle, appearance of fright and imbecility, paralysis or paralytic weakness of the sphincters, with involuntary discharge of urine and feces, dilatation or alternate dilatation and contraction of the pupils.

We have adverted to the power possessed by belladonna of curing *paralysis of the sphincters of the bladder and anus*, with involuntary and unperceived discharge of urine and feces. These paralytic conditions may be caused by rheumatic exposure, and may also be entailed upon the patient as the consequence of some mismanaged acute disease, such as typhus, *Paralysis of the optic and auditory nerves* from similar causes may likewise yield to belladonna, provided the affection is curable.

INFLAMMATORY GROUP.

Belladonna causes inflammation by first depressing the brain, after which the functional power of the ganglionic system becomes similarly but secondarily affected. It affects the brain *primarily* and the ganglionic system *incidentally*, whereas aconite affects primarily the ganglionic system and incidentally the brain. The first effect of belladonna upon the brain is to depress or unhinge its functional power and incidentally the functional power of the ganglionic system; the stage of organic reaction is characterized, as in the case of aco., by capillary engorgements, a full, rapid and bounding pulse, glowing redness of the face, protrusion and suffusion of the eyes, heat of the skin, etc. But in the case of belladonna, the antagonism seems to be between the capillaries and the central point of the ner-

vous system, the brain; whereas, in the case of aco., the antagonism is between the capillaries and the terminal ramifications of the ganglionic system. Hence, in the case of belladonna, the antagonism is marked by more obstinate, more deep-seated and more dangerous symptoms than in the case of aco. If, in a case of inflammation, the capillaries, under the stimulating effects of aconite, persist in remaining engorged; if the redness, swelling and heat continue; if the cutaneous exhalations show no signs of return; if the brain continues to feel dull, weary, torpid, we may rest assured that the primary seat of the inflammatory process is not in the ganglionic system, but in the brain itself and that belladonna is required.

Some of the most important organs are liable to attacks of acute inflammation. Inflammation of the brain has already been considered under the head of cephalic group. We will here add that belladonna may be in therapeutic rapport with inflammation of any part of the brain. It may be homœopathic to

Meningitis and arachnoiditis, with sopor, excessive dizziness, heat of the head, deep-seated, tearing, lancinating pains in the head, aggravated by motion, violent congestion to the head with throbbing of the carotid and temporal arteries. Pulse hurried, but not hard and bounding; rather soft. Dry and brown-looking tongue (at times white or yellowish) contraction of the pupils, sensitiveness to light.

We may also mention the use of belladonna in sunstroke. The patients are seized with violent dizziness, they fall down, unless supported. In violent cases they are suddenly deprived of consciousness and fall down as if struck by apoplexy. Other symptoms are: Violent stupefying pain in the head, nausea and even vomiting, white-coated and dry tongue, loss of sight and hearing, stupor and even coma, pulse accelerated, not hard. Diminished secretion of feces and urine.

Myelitis of the chronic form, especially if caused by the retrocession of an eruption, symptoms of marasmus and of exhaustion of the brain, accompanied by characteristic symptoms of belladonna.

Carditis and Pneumonia may demand its exhibition, when the brain becomes involved, presenting symptoms which establish the homœopathicity of the remedy to the case. In carditis we find also a feeling of agonizing distress in the region of the left ventricle, as from a red-hot coal; the pulse is small, jerking

and intermitting, while the heart thumps violently against the thoracic wall. In pneumonia there is drowsiness, the tongue is dry and brown, the lips parched, the skin dry, the pulse small, compressible, intermitting.

It is called for in *metritis* in consequence of menstrual suppression, or after confinement. The patient complains of burning pains high up in the vagina, and if the peritoneum is involved, the hypogastric region is painful and somewhat distended. Frequent and difficult urination. Drowsiness, stupor, delirium, nervousness. Fetor from the uterus, slight oozing of foul, blackish and fluid blood.

Peritonitis, with burning-tearing, crampy pains at a certain spot, usually near the navel, extending from there over the whole abdomen. Distention of the abdomen, tenderness to touch; fullness and hardness of the pulse, from 100 to 110 beats per minute; tongue coated white, urine hot and excoriating, bowels constipated, face flushed. Characteristic brain symptoms.

The following pathogenetic symptoms define its use in *angina faucium*: Intense redness of the throat; excessive dryness and heat; stinging, lancinating pains when swallowing; swelling of the internal parts, uvula, tonsils, back part of the tongue; sensation as if the fauces were constricted, and as if the passage of even a drop of liquid would be impossible; feelings of excoriation in the throat; the tongue looks inflamed, and is lined with a thick, yellowish, brown coating, feels dry; discharge of a thick, viscid, ropy phlegm from the mouth; hemorrhage from the throat; foul taste in the mouth; swelling of the neck, with throbbing of the carotids; these symptoms are accompanied by creeping chills, followed by heat and dryness of the skin, irritated, hard, hurried pulse, dizziness and violent pain in the frontal region, red urine, constipation.

In *putrid sore throat* or diphtheritic inflammation of the pharynx and even in certain stages of true diphtheria, belladonna may be called for by the symptoms of the case.

Adenitis, inflammation of glands, requires belladonna, regardless of their location. The glands become hard, shining, rose-colored; there is sharp, stitching pain in them and a tendency to an erysipelatous inflammation may develop. It is of great value if the disease is acute, resulting from exposure in scrofulous subjects; it is also of use in chronic cases. Parotitis of six years' standing has been cured by belladonna.

In *Mastitis* belladonna is very valuable. The pain is pulsating, running in various directions from one common center. Feeling of heaviness in the breasts.

Belladonna is also a valuable remedy in *congestions*, acute and chronic, of the *brain, lungs, air-passages, bowels, spleen, liver, uterus*. It is of particular value in acute forms, accompanied by symptoms of violent congestion, full, bounding pulse, and other characteristic symptoms of the drug, among which the mental and nervous symptoms deserve especial attention.

Belladonna is very useful in *phlegmonous erysipelas* of various parts, face, chest, bowels, etc. The skin is intensely red, thick, hot and painful. The parts are swollen, pulse large and rather accelerated, but soft undulating. The patient feels drowsy, thirsty, tongue coated yellowish or white, with unpleasant taste in the mouth. The hands and feet, or only the feet, may be cold.

Belladonna likewise causes a burning redness of the tip of the nose; hence in *nastitis*, or inflammation of the nose, this great agent may be of use, especially in the case of drunkards, scrofulous individuals, and persons having a delicate, sensitive and irritable skin. If the inflammation is attended with extreme sensitiveness of the smell and tingling of the tip of the nose (effects of belladonna) belladonna is the more specifically indicated.

ORBITAL GROUP.

Belladonna is homœopathic to very many forms of ophthalmia, involving nearly every part of the eye. We may mention scleritis, keratitis, iritis, retinitis, conjunctivitis, choroiditis, pannus, staphyloma, etc. It is a valuable remedy in catarrhal, rheumatic, arthritic, scrofulous and purulent ophthalmia. The following symptoms will indicate the sphere of the curative action of belladonna in these diseases: Bright redness of the globe of the eye; vascularity of the parts; feeling of heat in the eyes; sensation as if the eyeball were enveloped in hot vapor; severe pain, especially at night; stinging, darting, tearing pain; pulsating pain; intense, maddening pains in the eye; beating, throbbing headache with characteristic symptoms; optical phantasms; intense sensitiveness of the eyeball to motion or contact; lachrymation; photophobia; contraction (dilatation) of the pupils.

Our provings show that dimness of vision is one of the most characteristic effects of belladonna.

Hemorrhage from the eyes, a sort of oozing of blood, is cured by belladonna.

AUDITORY GROUP.

Belladonna causes symptoms suggesting its use in various inflammatory conditions of the organ of hearing. It causes sounding and buzzing noises in the ears, shooting stitches through the ear, sensitiveness to sounds, tearing pain in the inner and outer ears, purulent discharge from the ear. It may be called for in *Otitis*, inflammation of the ear, and in *Otalgia*, earache, if the symptoms correspond with those obtained by the proving of this drug.

Deafness, hardness of hearing, may require belladonna, especially if caused by suppression of an acute scarlet or measles eruption. The patient complains of buzzing, wind rushing out of the ears, loud reports in the ears as from a gun.

BUCCAL GROUP.

Many of the symptoms which distinguish the action of belladonna upon the tongue, lining membrane and secretions of the mouth occur in the course of functional disturbances of a high order. Belladonna causes a sensation on the surface of the tongue as if it had gone to sleep, as if it were dead, like fur or cotton; the tongue has a white coating upon it, or is covered with a quantity of yellowish-white, tenacious mucus; the papilæ are bright red, inflamed and swollen; the tongue is sore and painful to the touch; bad smell from the mouth, early in the morning on waking; the mouth feels parched, as if the skin had been destroyed by something acid or corrosive; he is almost unable to swallow on account of the dryness of the mouth, nose and fauces. These symptoms may occur in fever, more particularly in typhoid and mucous fevers.

Belladonna causes the secretion of a quantity of tenacious mucus in the mouth. It also causes profuse ptyalism, soreness of the inner side of the cheek, especially in the region of the orifice of the salivary duct, which feels as if corroded. Under the action of belladonna, the mouth becomes filled in the morning with a quantity of putrid saliva; the saliva which is secreted by belladonna is thick, tenacious, white and sticking

to the tongue like glue; it may sometimes be seen hanging out at the mouth in long strings. These various symptoms may likewise occur in fever, more particularly in typhoid fever, with predominance of gastric, mucous and bilious symptoms; as well as in common angina faucium, and in angina diphtheritica or in putrid sore throat.

Belladonna causes a complete aversion to all sorts of nourishment or drink, to coffee, beer, meat, acids. These indications render it valuable as a remedy in *gastric derangements* where such symptoms occur. They likewise point to belladonna as a remedy for *hysteria*, which is very frequently characterized by such capricious alterations of the taste as belladonna seems capable of occasioning.

Belladonna likewise causes spasmodic hiccough, or spasmodic eructations resembling hiccough, or hiccough succeeded by violent thirst, redness and heat of the head.

Belladonna causes nausea and vomiting. This vomiting may be a vomiting of bile and mucus; or it may be a mere retching which is so violent that the face turns blue, and may be attended with the breaking out of sweats as from anguish. This violent irritation of the nerves of the stomach may occur idiopathically as a symptom of *acute indigestion*, or it may exist as a sympathetic affection developing itself in consequence of some primary lesion of a central vital organ, such as the brain or womb.

The action of moderate doses of belladonna indicates the use of this medicine in congestive and spasmodic affections of the male organs.

Belladonna weakens the sexual powers and depresses the desire for sexual intercourse. It causes: Nocturnal emissions, while the penis remains relaxed; discharge of the prostatic fluid, without erection; the sexual appetite seems to be completely extinguished.

The female organs are likewise powerfully acted upon by belladonna. Here, too, this agent seems to induce spasm and congestion. Moderate doses induce marked signs of organic reaction, larger doses depress and disorganize the sexual functions of the female, retard and alter the quantity of the menstrual discharge, arrest the flow of milk, and weaken the uterine vitality generally.

Puerperal Fever during the congestive stage, with determination of blood to the brain, throbbing headache, stitches through

the brain, flushed and bloated countenance, glistening and staring eyes, dizziness, occasional delirium, nausea and vomiting, furred tongue, dry and sticky mouth, foul taste, soft, quick pulse, diarrhoea or constipation, red urine.

Puerperal Mania may likewise occur, and require the use of belladonna if the mania is of the furious, ludicrous or muttering order.

The tendency to sanguineous engorgement which characterizes the action of belladonna upon the womb, may be accompanied by prolapsus or falling of the womb, or with a sensation as if the womb had descended, although there may not be any actual descension. The patient experiences a dragging, heavy pain in the uterine region, which generally disappears when lying down.

Belladonna may be adapted to fevers of an intermittent as well as of a remittent type. General indications for belladonna in fever are: Cerebral congestions, flushed and puffed face, sparkling or staring eyes, headache, restlessness, drowsiness, starting of the limbs, nausea, dry and sticky mouth, sensitiveness to light and noise, etc.

In *Eruptive Fevers*, belladonna occupies a prominent rank as a remedial agent. It causes measles-shaped eruptions, and may therefore be useful in *measles*, if the brain has to be assisted in bringing the eruption out. We may infer the existence of this necessity from various symptoms; sopor or even stupor, convulsive startings, flushes in the face or changes of color in the face, hurried and irregular pulse.

Belladonna likewise causes scarlet-spots or a scarlet redness in the face, on the neck, chest, abdomen, hands, sometimes accompanied with hot swelling of the parts, small and quick pulse, asthmatic dyspnoea, violent cough, delirium, rubbing of the nose, dilatation of the pupils. This effect of belladonna upon the skin has led to its use in the smooth Sydenhamian scarlet fever, as a sort of specific for this very formidable malady. Even allopathic practitioners recommend its curative virtues in this disease.

Antidotal Treatment. In a case of poisoning we first withdraw the poison by means of an emetic, for which purpose from 20 to 30 grains of the sulphate of zinc may be administered; after which we resort to such antidotes as strong lemonade, strong black coffee, cold affusions, mustard-bath to the feet.

A CASE OF PAROTITIS (MUMPS) WITH SIMULTANEOUS
ACUTE NEPHRITIS.

BY ALFRED WANSTALL, M. D., BALTIMORE, M. D.

A. L., male, aged 5 years and 8 months, weight 55 lbs. A high-strung, pale, and not robust child. He had been languid and out of sorts for several weeks before December 16th, 1904, on which day he came to the office, after a rather long walk, looking very tired, with a febrile pulse and a moderate and somewhat painful swelling of the submaxillary gland on the right side. \mathcal{R} . Rhus tox. $\mathfrak{3}\times$.

December 17th. The child was kept in bed to-day on account of the appearance of the urine. Temperature not taken, but he was feverish. The swelling of the right submaxillary gland is already subsiding, but the left one is beginning to swell. The urine is very bloody, bright red in color. Albumin is present in excess of the quantity accounted for by the amount of blood present. Microscopically: Abundant red blood corpuscles and leucocytes; no casts. \mathcal{R} . Cantharis, $\mathfrak{3}\times$.

December 18th. Swelling of the right submaxillary gland gone, moderate swelling of the left one. Urine bright red from the presence of blood. Albumin 0.2 per cent. (this and all following percentages of albumin are made according to Esbach's Albumenometer).

December 19th. Left submaxillary gland smaller, softer and less painful. Temperature 101° . Urine bloody but dark brown in color. Albumin 0.7 per cent. Microscopically: Abundant casts, epithelia, red blood corpuscles and leucocytes.

December 20th. General condition better. Temperature 99° . Submaxillary gland less swollen. Quantity of urine 660 c.c., dark brown in color. Albumin 0.5 per cent.

December 21st. (6th day). Patient had a bad night. The right *parotid* gland is now much swollen and very painful to touch and to motion. The jaws can only be separated a very little. (The previous swelling of the submaxillary glands did not affect the mobility of the jaws.) Much pain on swallowing. Pulse 120. Temperature 100.6° . Quantity of urine 660 c.c. Bloodier in color than yesterday. Turbid. Albumin 0.7 per cent. Microscopically: Casts both hyaline and epithelial, but especially numerous are casts saturated with

leucocytes. In marked contrast to the very bloody character of the urine red blood corpuscles are very few. Free leucocytes are very abundant. The urine on standing deposits a pronounced layer of leucocytes, and to which the turbidity of the fresh urine is due.

The diagnosis of mumps was made to-day. *R. Belladonna* i. and *Lachesis* 6.

December 22nd. The patient had a good night. Pulse 120. Temperature 101.1°. Parotid swelling the same. Jaws almost locked. Quantity of urine 440 c.c. The small quantity of urine is probably due to the small amount of water taken owing to the difficulty in opening the mouth and pain of swallowing. Urine more deeply blood stained than yesterday. Albumin 0.9 per cent.

December 23rd. Patient had a good night. Parotid swelling the same. Temperature 98.8°. Pulse 100. Urine dark, reddish brown. Turbid. Quantity 540 c.c. Albumin 0.5 per cent. Microscopically: Very few red blood corpuscles. Coarsely granular (epithelial) casts, a few hyaline casts studied here and there with leucocytes, the prevailing casts, however, are casts completely saturated with leucocytes. The standing urine deposits a moderately heavy layer of leucocytes (pus).

December 24th. Parotid less swollen and the jaws can be separated with some freedom. Swallowing less painful, and the patient is altogether better. Temperature 100°. Pulse 96. Quantity of urine 1020 c.c. Color reddish brown, but lighter than yesterday. Turbid. Albumin 0.25 per cent. The leucocyte deposit less marked.

December 25th. Temperature 99.2°. Pulse 98. Much better in every way. Gland less swollen. Swallowing easy and the mouth opens freely. Urine is a pale red in color, and faintly turbid. Quantity 1500 c.c. Albumin 0.25 per cent.

December 26th. Temperature and pulse normal. Parotid still somewhat swollen. Urine slightly turbid and bright. (light) red in color. Quantity 1080 c.c. Albumin 0.3 per cent. Very few casts and these are mostly fragmentary cast like collections of leucocytes; abundant free leucocytes still dominate the microscopic picture. Here and there a red blood corpuscle.

December 27th. Temperature and pulse normal. Right parotid still swollen and hard. Urine has a bloody tinge but

less marked than yesterday. Quantity 1440 c.c. Albumin 0.15 per cent. Patient is very bright and none the worse for the excitement of the Christmas holidays.

December 28th. A faint trace of a bloody color to the urine. Quantity 1100 c.c. No true casts. A few red blood corpuscles and numerous leucocytes. Albumen 0.05 per cent.

December 29th. Parotid still swollen and slightly sensitive. Urine plainly blood stained. Quantity 1200 c.c. Albumin less than 0.05 per cent. A few coarsely granular casts, numerous leucocytes and a few red blood corpuscles. The leucocytes still form a perceptible deposit in the standing urine.

December 30th. Quantity of urine 1200 c.c. Pale yellow. No indication of the presence of blood in the color. Albumin a trace. A few fragmentary coarsely granular casts, some leucocytes and here and there a red blood cell.

December 31st. Quantity of urine 900 c.c. A mere trace of albumin. $\text{R. Ferrum phos. } 2x$.

January 2nd, 1905. Quantity of urine 1200 c.c. The urine is absolutely clear for the first time, but there is a suspicion of a bloody tinge to it. No casts; some leucocytes, and here and there a red blood cell.

January 4th. Quantity of urine 1320 c.c. A mere trace of albumin, amounting to an opalescence in a previously absolutely clear urine. Centrifuged: There is a moderate number of leucocytes, and here and there a red blood corpuscle. One well formed cast completely saturated with leucocytes was seen. Right parotid is somewhat swollen and hard, but painless.

January 7th. Quantity of urine 1320 c.c. Urine of a pale amber color, absolutely clear, and without a trace of albumin. Centrifuged: No casts, a few epithelia, leucocytes and red blood corpuscles in about equal numbers, three or four of each to a field (1-6 objective). The red cells appear to be increased over what they have been, but it is probably an appearance due to the decreased number of leucocytes. The right parotid still perceptible and hard.

January 11th. (27th day). The child has been out of bed since January 8th. A remnant of the right parotid, well under the horizontal ramus of the jaw, still palpable and hard. Quantity of urine 1440 c.c. The urine is 36 hours old, turbid from bacterial growth, and shows a few disintegrating leucocytes. No albumin.

January 18th, (34th day). The child has been out of doors to-day for the first time. A small hard nodule of the parotid gland is still to be felt deep in the neck. The urine collected after he came in is clear, and contains no albumin. Centrifuged: Triple phosphates, epithelia, here and there a leucocyte, and red blood corpuscles; the latter, while very few in number, are more numerous than the leucocytes.

Remarks: It is noteworthy that at no time during the course of the illness was there spontaneous pain, or soreness to pressure, in the region of the kidneys. Osler mentions albuminuria, even acute uraemia, with convulsions as occasional complications of mumps. L. Emmett Holt says: Nephritis has followed sometimes as late as 4 or 5 weeks after the attack. Single cases have been reported by Croner, Isham, Henoch, and others.

The complication may be more common than is supposed, because it is so seldom looked for; certainly, in the present case there is no reason to suppose that it would not have been overlooked if the bloody urine had not attracted attention to the kidneys.

DELIRIUM: BELLADONNA, STRAMONIUM, HYOSCYAMUS.—The indications for Belladonna are so precise that error is hardly possible save in confusing Belladonna with the similar Stramonium and Hyoscyamus. The Belladonna delirium is merry, with laughing, singing, loquacity, or, furious, obliging the restraint of the patient who is wild, insulting, striking, kicking, etc., or, alternating from one state to the other. Hallucinations of all the senses are present, but especially of vision; he sees dogs, cats, of which he is not afraid; there is red face, dilated pupils, dry throat, carotid pulsation.

In Hyoscyamus the febrile symptoms are less marked, and it is more suitable to delirium without active congestion resulting from a toxemia, as in asthenic cases.

Stramonium is best indicated in delirium even more acute and active than Belladonna.

In Hyoscyamus the face is pale and the hands cool, although the thermometer may show fever; the delirium is incoherent and tranquil, and is worse on attempting to drink. In Stramonium fever is high as in Belladonna, but the face is more constantly flushed, the glance is sparkling, and the passion for striking and biting even more apparent than in Belladonna, the least touch aggravates and there is trembling of tongue and hands. To resume: absence of fury, Hyoscyamus; fury, Belladonna; excessive fury, Stramonium. Pale face, Hyoscyamus; alternately pale and flushed, Belladonna; steadily flushed, Stramonium. Worse from drinking, Hyoscyamus; from light, Belladonna; from contact, Stramonium.—*Dr. Derch y. Marsal. Revista Hom. de Barcelona.*

P. W. SHEDD, M. D.

EDITORIAL.

DANGER TO THE LAMBS.

IN December, 1902, we took occasion editorially to refer to a letter received by us. This letter read as follows:

Dear Sir: You have been recommended to us as a suitable person to join in the promotion of the ————. If you are in a position to interest others in a legitimate investment, and will write us to that effect, we will submit to you our plan, and give you an opportunity to join with us. We are carefully selecting a limited number of persons outside of the officers and directors, to whom we will make the offer. If you would consider favorably such a proposition, we would be pleased to submit it to you.

Kindly let us hear from you at once.

Yours truly,
The ———— Company,
By ————,
Secretary.

We assume now as we did then that it was the intention of said company to offer us stock in said corporation in return for the use of our name to induce others to invest their hard-earned money in the promotion of said company. At any rate, we made no effort to secure the proposition which was to have been offered us. We heard nothing more of the company until recently, when we happened to observe that it was advertising in medical journals, evidently with the idea that it could induce doctors to invest in it. In other words, after nearly three years of attempted promotion, the company still needs money. This fact of itself speaks strongly against the soundness of the venture, for capital is so abundant, and seeks so industriously for opportunities to place itself where it will secure safe and good returns, that it stands ready for use whenever any good proposition presents itself. As we said in a previous editorial, a company which makes a special effort to secure doctors as investors places itself in the position of a man who borrows money from a woman,—he cannot obtain

credit elsewhere. Doctors are notoriously bad business men; they are easily fleeced by any smoothly worded proposition and are only too ready to invest their money with companies which promise much, and we might add perform little. Many of the companies which seek subscribers through the medium of the advertising pages of journals, pay for their advertisements in stock. Concerning such business arrangements we may say that the course stultifies the proprietor of the journals accepting such contracts. They sell their good names very cheaply. For paper worth so much a pound, they place themselves in the position of aiders and abettors of swindlers. Moreover, they lead their friends and admirers to invest money for which there is no possibility of return to say nothing of endangering their principal.

Prior to the publication of the letter which we have quoted, we were in almost daily receipt of letters offering us opportunities to invest with prospects of large dividends. Some time before, we had been led to place money in a wild cat venture, losing every penny invested. As a result, we feel that we were placed on the list of those gullible individuals known to the financial world under the inelegant name of "suckers." Following the publication of the editorial in December, 1902, we received no additional wild cat propositions of any kind, and we felt that our good name had been restored and that we were no longer listed among the "suckers." This assumption that there is a directory of this kind is not the product of an active imagination, for we have been told that there is an information bureau which can give business men lists of names of individuals likely to view favorably certain business ventures. As an example we were told that there is a list of individuals who have a penchant for investing in industrial stocks; another list of those who go in for mining stocks. We asked if there was a directory of "suckers." We were told that this was doubtful, for all the Carnegie libraries in the country would not be large enough to contain such a directory, if it was anything like a complete one.

We once remarked that our "Gold mine lay in front of our door." We are more convinced of this fact than ever. Those of us in possession of good practices find that our incomes run along each year with almost the reliability of a fixed salary, subject to regular increase by reason of our reliability and industry. This is our gold mine, and it is our practices we

should foster. As in the case of men on salary, certain sums should be laid aside each year to support us in case of illness or old age. Such savings should be invested only in what financial men speak of as investment securities; securities that would be approved by reliable trust companies and Orphans' Courts. True it is that the dividends will be small; but they are sure, and we are not obliged to lie awake night after night in fear of the loss of the principal.

We may cite as a frightful example the sad financial ending of a certain physician. He rejoiced in the possession of a practice which netted him not less than \$12,000 per annum in cash. He gambled in real estate, of which he held many acres, most of it heavily encumbered, the total amount going well into a million. In common with others, we admired his business foresight, and thought him a lucky man. And yet when he died, the forced sale of the properties in his name did not net sufficient to pay his mortgages, and the creditors took execution on his personal estate. Even then, the family were left penniless. Such was the result of over twenty-five years of hard labor.

THE LOW OBSTETRIC FEE.

IN no department of medical service do physicians receive smaller remuneration for their time and skill than in attendance upon obstetric cases. The fee in most localities varies from five to twenty-five dollars, so that the average amount of money received for obstetric cases will not amount to more than ten or twelve dollars. This is less than the ordinary charge for performing circumcision, an operation involving practically no danger and but little time or skill. If the charges for obstetric work were in proportion to the charges made for surgical and gynaecological work, one hundred dollars would be a very moderate figure for proper attendance upon a case of normal labor, while the fee for abnormal cases would be still higher.

Of course we are speaking now of charges among that class of patients who are financially able to pay the physician a just fee. The charge to the poor and to persons in moderate circumstances must be based upon their ability to pay, not on the character and amount of the service performed. The small-

ness of the obstetric fee is due partially to the attitude of the laity and partially to the position taken by the medical profession toward work of this character.

Patients do not appreciate the value of skillful obstetrical attendance. As they have the opportunity daily to observe women whose health has been shattered by infection, lacerations or other sequelæ of child-birth, not to mention those whose lives have been lost during labor, we would suppose that the necessity of special care and skill on the part of the accoucheur would be evident to them. Such, however, is not the case, and the average mother is perfectly satisfied by a superficial examination at the onset of labor and three or four visits during the puerperium. Not only do they not expect an examination prior to confinement, but very many would absolutely refuse to allow such an examination to be made. Many women frown upon the attempts which their medical attendant may make to conduct the delivery in accordance with the principles of cleanliness and asepsis as unnecessary and officious, and when infection occurs from lack of cleanliness, they regard it as an unavoidable visitation of Providence.

The medical profession also is much to blame for the low obstetric fee. When a physician enters a community he fears that should he attempt to raise the price of obstetric work he will injure his prospects of obtaining a practice. He realizes that it would be impossible for him to do scientific work for the ordinary fee, so he determines to follow the example of most of his professional associates and "get the baby out" with as little trouble to himself as possible. He realizes—if he has been properly trained in modern obstetric methods—that he is not putting forth his best efforts in behalf of his patient, but soothes his conscience with the thought that he is doing all he is paid to do. This policy is a short-sighted one and works to the financial disadvantage of the physician as well as to the harm of the patient.

If the fee for obstetric services is to be raised, women must be taught by precept and by example that more pains-taking work is necessary for their own good. They must be taught that repeated examinations of the urine are necessary during pregnancy; that at the seventh month a thorough examination of the pelvis should be made; that perfect asepsis is as important during childbirth as during any surgical operation. They must be impressed with the fact that no department of

medical work entails greater responsibility—two lives being involved—or requires quicker or more intelligent judgment and action. If the public were more generally aware of the truth of these facts we are convinced that intelligent women would appreciate the importance of careful attention during pregnancy and childbirth, and would be willing to adequately compensate the physician for extra care and skill. It is to the interest of both patients and physicians that the present low obstetric fee be discouraged, and that a fee which would justify careful and scientific work be instituted.

THE TEACHING OF THERAPEUTICS IN ALLOPATHIC MEDICAL SCHOOLS.

THERE are many homœopathic physicians who are continually lamenting the weaknesses and imperfections of the methods of teaching materia medica and therapeutics in homœopathic colleges. It would seem that our allopathic brethren are making complaints along the same line, as the following quotation from an article by Dr. H. C. Wood, Jr., entitled "Proprietary Therapeutics," will show:

"The subject of therapeutics is all too imperfectly taught in our medical schools, while that of prescription writing is almost completely ignored." "The recent graduate is called on by his first patient, and he has ausculted and percussed the sick man from the tip of the ear to the end of the toe, he has counted the number of corpuscles in the blood, he has taken a sphygmographic tracing of his pulse, he has made a microscopic examination of the sputum, and a bacterial culture from the throat, he has tested the urine for acetone and the diazo-reaction, he has determined the percentage of hydrochloric acid in the stomach—all these things have been taught him at his medical school, but no one has thought it necessary to teach him that refinements of diagnosis are but a means to the end of a more successful therapeutics. Perhaps his professor of medicine belonged to the sect of nihilists and taught 'leave the patient to nature, and you will get an interesting autopsy!' The young physician realizes that his patient does not want to make an interesting autopsy and that he must at least make a pretence of doing something, and while his eyes are roving round in thought as to what he can order,

they fall upon a green and purple announcement received in that morning's mail that 'Jones' Creatin' gives wonderful results. Feeling his incompetency and yet fearful of displaying his ignorance, is it any marvel that he falls an easy victim to the blandishment of the blotter?"

While Dr. Wood's style is somewhat overdrawn and exaggerated, every practical physician recognizes that he states an unfortunate truth. There is great danger lest the graduate of the modern medical college in his eager pursuit after post-mortem examinations and laboratory methods, should overlook the great business of the physician, which is *to heal the sick*.

TREATMENT OF IDIOPATHIC EPILEPSY.—D. R. Brewer says that spontaneous cure of this disease is possible, and mentions one of several cases in his observation. He calls attention to the necessity of more care as to the prevention of the trouble, especially in infants suffering from convulsions. The proper treatment and environment in these cases may prevent the later development of this disease. The treatment of the individual convulsions is also important, and the aura may afford a warning that enables the patient to abort the attack. He advises the carrying by epileptics of nitrite of amyl pearls for this purpose. Other methods may also be effective in special cases. In epilepsy there is an autointoxication usually of gastrointestinal origin and the diet should be carefully regulated. These patients are usually very hearty eaters, and it is advisable to restrict the diet in quantity to regulate periods of eating and to insure thorough mastication and digestion. Intestinal elimination must be also attended to, and for intestinal antiseptics he finds salol combined with phytolacca often very useful. For combating the nervous irritability the bromides are most useful, and he prefers the sodium salt. Their overuse, however, is dangerous, and Brewer refers much of the existing epileptic insanity to this cause. The dose should seldom exceed sixty grains daily, in plenty of water after eating, and he sometimes adds fluid extract of *Solanum carolinense* in one-half to two drachm doses to the bromide mixture. Strychnine is also a valuable remedy for meeting the circulatory and vasomotor defect, and he specially recommends fluid extract of *Adonis vernalis*. Cerebral Sclerosis calls for alteratives. In conclusion he insists on the importance of allowing plenty of time, at least five years after disappearance of symptoms, before claiming a cure of epilepsy.—*Journal of American Medical Association*. March 25, 1905.

WILLIAM F. BAKER, A. M., M. D.

GLEANINGS.

HEMATURIA IN HYDRONEPHROSIS.—Bangs discusses hematuria as a symptom of hydronephrosis. A thorough and careful review of the literature failed to discover any cases of this kind, except in one instance, in a series of 40 cases, among them being 9 cases in which hematuria was a symptom. He adds one case to the list. The patient was a male aged 19. The presence of blood in the urine was intermittent and variable in quantity, the latter being increased by slight trauma, such as jolting in a wagon and by the manipulations of the kidneys necessary to a diagnosis. It was also suddenly increased by unknown causes, but at no time was there a serious amount of blood in the urine. The left kidney was reached by means of the Mayo-Robson method and was found to contain about a quart of fluid. Comparatively little renal tissue was left. There was a moderately free hemorrhage from the interior of the sac, which was controlled by free irrigation with very hot water. A nephrectomy was not performed until some months later. During the operation the sac bled freely from its interior. The hemorrhage continued free and uncontrollable until the liberated parts of the sac were folded on themselves, and the amount of hemorrhage from the thin and expanded tissue was sufficiently great to cause a very serious condition of collapse. The patient made an uneventful recovery. A small flexible bougie was passed through the ureter to the bladder to demonstrate the absence of any obstruction between the kidney and bladder. At the time of the nephrotomy there was no calculus either in the kidney or its pelvis, and no obstruction of any kind elsewhere. The microscopic appearance of the tissue was typical of hydronephrosis.

The etiology of the condition in this case was very obscure. The patient had had unusually good health from his infancy up; there was no history of traumatism; no history of renal colic nor of pain in the left side, and no symptom indicating the beginning of the malady until it was fully developed. Bangs lays special stress on hematuria as a symptom of hydronephrosis and repeatedly calls attention to the degree of hemorrhage during the two operations.—*Medical News*, February 11, 1905.

WILLIAM F. BAKER, A. M., M. D.

ZOMOTHERAPY IN PULMONARY TUBERCULOSIS.—For fifteen years Philip has been an advocate of the systematic, continued administration of raw meat in the treatment of pulmonary tuberculosis. The form and dosage must be regulated in the way in which we regulate the administration of any drug. The method is applicable not only to tuberculosis but to a variety of wasting conditions, in gastro-intestinal disturbances and generally in cases where for some reason the nitrogen output is or has been unduly increased, or where the nitrogen intake on ordinary diet is insufficient for the needs of the patient. The raw meat is administered as follows: 1.

Finely minced or bruised beef slightly seasoned with salt, etc., according to taste, served cold or gently warmed throughout, one-half pound two or three times daily. The meat must be perfectly fresh. 2. Beef-juice prepared as follows: Extract one-half pound of meat in one-half pint of cold water plus one-half teaspoonful of salt; slowly heat to 100 F. Extract the liquid through a cloth and serve. Or the juice may be expressed from the meat directly without the addition of water. In either case the meat-juice must be freshly prepared for use. 3. Raw meat soup, prepared as follows: Mix one-half pound of finely minced fresh meat with sufficient milk to produce a thick, uniform paste. Immediately before serving add one-half pint of milk at 150 F. In place of milk the soup may be made in similar fashion with stock of beef or chicken or veal. Though not in the same dietary category, Philip also includes quite fresh raw eggs, one, two or three before meals, to be swallowed like oysters. He has not found it difficult to accustom the patient to the use and even to the enjoyment of these raw products. —*Practitioner*, London, January, 1905.

WILLIAM F. BAKER, A. M., M. D.

DUODENAL ULCER AND ITS TREATMENT.—D'Arcy Power states that the subject of duodenal ulcer has not yet received adequate attention, though its onset is severe and the sequelae may be dangerous. It is usually thought to be of rare occurrence, but during the last few years the author has had the opportunity of operating on seven cases and observing others. These cases grouped themselves sharply into two classes: Those in which the ulcer has perforated and those in which there were no perforation. The cases which perforated required immediate surgical treatment and were sutured with more or less success. Those which did not perforate were either treated at once on account of hemorrhage or came for treatment many years afterward in consequence of duodenal narrowing due to cicatrization of the ulcer. The non-perforating cases were treated by retrocolic gastro-jejunostomy. As all the cases were in males, it may be presumed that this condition is more common in males than in females. After noting in detail the symptomatology of the two classes of cases the author fully considers the question of diagnosis and states that it should be easy to diagnose the cases where perforation has occurred, but in practice it is often found to be a matter of very great difficulty. The symptoms are not characteristic and so the diagnosis is often left in abeyance, in hope that a few hours' delay will render the signs and symptoms more definite. Such advice is likely to prove fatal, for, instead of making the diagnosis clearer time only renders it more obscure. The slight clues which could be picked up shortly after the onset are soon masked by the peritonitis which follows. Delay not only allows the peritonitis time to develop, but it permits the extravasated contents of the alimentary canal to gain access to the innermost recesses of the peritoneum, so that a subphrenic, pelvic, or iliac abscess may still further complicate a condition which is well-nigh desperate. A rapidly increasing pulse rate with acute abdominal pain and but slight objective symptoms is an indication for an exploratory operation. The diagnosis becomes even more obscure without operation, and the case may be mistaken for pneumonia, appendicitis, or peritonitis due to causes other than intestinal perforation. The lesson to be

learned from the cases that have perforated is to operate early. The perforation often takes place without warning, thus it occurs in persons who are otherwise in excellent health. Such persons bear an abdominal operation very well, it is better to open the abdomen needlessly than to wait until the symptoms of peritonitis make an operation imperative. The diagnosis of the non-perforated cases is even more difficult, for the reason that there is no pathognomonic sign of non-perforating ulcer of the duodenum. After noting in detail the various symptoms the author reaches the following conclusions: (1) Duodenal ulcers are not very uncommon. (2) So far as he has seen them, duodenal ulcers are single and are more common in men than in women. (3) Duodenal ulcers may perforate and cause acute symptoms, or they may heal, and by cicatrization lead to symptoms of chronic duodenal obstruction. (4) The sequelae of a healed ulcer may be so remote that the symptoms are mistaken for those due to cancer of the pylorus, and the patient is allowed to drift from bad to worse under the erroneous notion that he is bound to die. (5) There is no means of recognizing the existing of a duodenal ulcer in a great many cases until it perforates or the results of its cicatrization become manifest. (6) The treatment of duodenal ulcers consists (a) in the direct suture of a perforated ulcer, the prognosis being less favorable than in similar cases of perforation; (b) the performance of gastro-jejunostomy in cases of dilated stomach due to duodenal constriction, the prognosis being the most favorable of all the conditions for which the operation is performed at the present time.—*British Medical Journal*, December 17, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE INTRAVENOUS INJECTION OF ANTITOXIN IN DIPHTHERIA.—*Buernacki* and *Muir* state that they are familiar with the work of Cairns, who has claimed increased efficacy for this method, who has stated that there resulted a quick subsidence of the glandular enlargement, a strikingly rapid decline in the toxæmia, and in pneumonic cases a marked diminution of the restlessness. In 50 cases, 20 of which were treated by this method, there were only 3 deaths, a mortality of only 6 per cent. Of these 17 were tracheotomy cases, with only 1 death; mortality of only 5.8 per cent. The authors state that they tried the method in 7 cases with 5 deaths in one series, and in another in 38 cases with 3 deaths.

After reporting these cases in detail they state in conclusion that in attempting to estimate the beneficial effects of antitoxin given intravenously these cases must be discounted in which a marked improvement follows intubation or tracheotomy, since this may be due mainly or entirely to relief of obstruction. Nevertheless, it will be noted that of 9 cases operated only 1 died, and this must be regarded as a low mortality. Even in cases other than laryngeal, it would seem very difficult, if not impossible, to say of any individual patient that a better result was obtained than might have followed subcutaneous injection. However, there was a fatality of 3 in 38 selected severe cases. This result seems to be in favor of the intravenous method. At the same time, although many of the cases treated were undoubtedly very severe, there has been a general fall in the fatality

of diphtheria in the district, and this leaves room for speculation as to whether the subcutaneous method might have yielded better results than in the past.—*Lancet*, December 24, 1904.

WILLIAM F. BAKER, A. M., M. D.

NASAL DISEASE AND HEADACHE.—Whitehead concurs in the belief that nasal disease is undoubtedly the cause of headaches in a certain percentage of cases, but thinks that it is doubtful whether it is possible for headaches to be produced by any nasal condition which does not give rise to discharge or to obstruction to normal nasal respiration. In all cases of persistent headache, a careful examination of the nose should be as much a routine practice as the examination of the urine, teeth, and the eyes, since, in some instances the nasal symptoms may be ignored by the patient, and a careful examination of the nose will be necessary to establish the diagnosis. Suppuration in the accessory sinuses and marked nasal obstructions, constant or intermittent, should be thoroughly treated. Small spurs, deviations, and hypertrophies, not causing obstruction should be left alone, as no relief will be given from the headaches by treatment of these. If the middle turbinate bones are enlarged and pressing on the septum, especially on the tubercle, and if all other possible causes of headache have been eliminated, partial removal of the hypertrophied bone should be advised, since in many such cases complete relief results.—*British Medical Journal*, Jan. 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

TREATMENT OF POSTNASAL ADENOID.—Cousins says that for children the best instrument for removing adenoids is the sterilized finger nail, as it can be safely employed both to define and to remove the growths in the obscure recesses of the nasopharynx, guided by the sense of touch. He makes use of a mouth gag consisting of a short rod of hard wood carrying a wooden ring to regulate its insertion between the teeth, and with one end lower than the other to suit the capacity of the different mouths. The operator's forefingers are protected by metal rings. Nasal probes, made of flexible metal, are used to clear the posterior nasal apertures. After preparing the patient by the frequent application of some deodorizing mouth wash, Cousins carefully examines the teeth and removes any loose tooth before the introduction of the gag. Whatever anesthetic is employed (he prefers the A. C. E. mixture or chloroform) only enough should be given to arrest corneal reflex sensibility, and it always should be stopped short of suspending the reflex actions of coughing and swallowing. As soon as the patient is ready, the head is brought well over the edge of the table and is supported by the hands of a nurse or by the arm of a surgeon; at the same time the shoulders are raised on a pillow. The nasal probes are passed through the inferior meatuses into the pharynx: the gag is fixed in the right angle of the mouth and the left forefinger is introduced into the pharyngeal fossa, and with it the sides and roof of the eustachian orifice and the posterior nasal apertures are rapidly cleared. The gag is then shifted to the left side with the right forefinger. After clearing away the adenoids, he excises the tonsils, if they are unhealthy

and enlarged. As a general rule rest and light and soft food are ordered for a few days.—*British Medical Journal*, Jan. 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

ETIOLOGY OF CARCINOMA.—Robertson and Wade record the result of researches undertaken with a view to testing the validity of the hypotheses that carcinoma is dependent on the growth of a parasite of the same class as the plasmodiophora brassicae, which is known to cause tumor growths in various members of the cruciferae, as well as in other plants. They succeeded in demonstrating the presence in carcinomatous tumors of bodies corresponding in form and in cycle to the plasmodiophora, and, in growing from such tumors an organism which accurately represents several successive phases of a parasite of this class. They used for their investigation chiefly carcinomatous tumors of the breast and malignant adenomata of the intestine removed at operation. The bodies in carcinomata, which they believe to be plasmodiophora, are considerably smaller than the plasmodiophora brassicae. Both show a considerable range of size in all their stages, and it is therefore somewhat difficult to estimate their average relative dimensions. Bodies accurately corresponding in reaction and forms to the resting spore of the plasmodiophora brassicae may be observed lying between the epithelial cells, among the connective tissues in the glandular spaces of adenomata, and occasionally within the nucleus or protoplasm of the epithelial cells. All the various phases in the developmental cycle of a plasmodiophora were observed by the authors and they succeeded in growing the organism from carcinomatous tumors. The technic of obtaining these cultures as well as the morphology are described in detail and therefore can be obtained from the original article. The authors have traced what they consider to be three parallel lines, namely, those of (1) the life-cycle of the plasmodiophora brassicae; (2) a series of bodies found especially within the cells of carcinomatous tumors, and (3) the stages of an organism which can be grown from such tumors.—*The Lancet*, Jan. 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

ATMOSPHERIC CONDITIONS AND CEREBRAL HEMORRHAGE.—A careful study of 66 fatal cases and 62 non-fatal cases of cerebral hemorrhage appears to have convinced Russell that there is a slight tendency toward the occurrence of cerebral hemorrhage on days of high atmospheric pressure and also on days of rising pressure, the former being probably the important factor. There is a very marked tendency on days of low-wind pressure, and the combination of a low-wind pressure with a high barometric pressure is the condition under which the largest number of hemorrhages took place. Apart from season, temperature in itself did not appear to exert any influence, though a small excess in the number of cases was noted on days with rising thermometer and also with a combined rise of atmospheric pressure and temperature.—*The Lancet*, Jan. 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE DIAGNOSIS AND TREATMENT OF HYPERTROPHY OF THE PYLORUS IN INFANTS.—G. F. Still finds that this condition of the pylorus is more common in male children. The condition is primarily due to phloric spasm. Symp-

toms come on, in his experience, from the fourth to the seventh week after birth, practically always before the third month, and unless vigorous measures be adopted, the children rarely survive the fourth month. Nevertheless the lesion may be practically a congenital one. Vomiting is not proof positive of its existence. It is forcible in character, occurs in spite of most careful breast feeding, is persistent in spite of the various measures which usually control this symptom and its amount is so large as to show that one vomitus represents more than one feeding—perhaps the accumulation of several feedings in the dilated stomach. Association of constipation with this persistent vomiting is of some importance in diagnosis. The child wastes rapidly. The two characteristic signs are visible peristalsis of the stomach (examination should be made immediately after feeding), and palpable thickening of the pylorus. Treatment is considered under the headings of dietary, nasal feeding, stomach washing and operative measures. These are all elaborated by the author. Under the last-named heading he mentions forcible dilatation of the pylorus, pyloroplasty and gastroenterostomy. Seven out of nine of his twenty cases were treated by dilatation and recovered. Operation has risks apart from those connected with shock and with the operation itself. There is tendency to looseness of the bowels after it and also a difficulty of nutrition, which in some of my cases seemed to make death from marasmus almost inevitable for some weeks after the operation, although they ultimately recovered; an important point this, which increases the need for careful consideration before embarking on operative measures, and which increases also the importance of previous stomach washing if thereby even a few ounces of weight can be gained. Stomach washing should be given a thorough trial before surgical measures are resorted to.—*The Lancet*, March 17, 1901.

WILLIAM F. BAKER, A. M., M. D.

TUBERCULOSIS.—Norman Bridge insists on the importance of reinforcing the nutritive forces of the body as the chief agency in the cure of tuberculosis. The fear of draughts is a popular error; another is overfeeding and the recommendation of alcoholics. Still another is the indiscriminate recommendation of exercise, as if muscular development could help to resist the disease. He also opposes deep breathing exercises. What we need is a safe and efficient method of putting the sick lung at rest in all unilateral cases. Another error is the use of ergot in hemorrhage, tending to increase the blood pressure, and the administration of salt solution in exsanguined cases, thus again distending the vessels and opening up their lesions. The patient is most likely to survive a large lung hemorrhage when the blood pressure of the parts is lessened to the utmost for the time. Still other errors are the recommendation of indiscriminate eating, taxing the digestive powers, errors of clothing, the injudicious recommendation of change of climate. In Illinois patients, by proper management, can be given 85 per cent. of the benefits of the very best climates. With the modern treatment of the disease, properly carried out, in almost any climate its mortality can be reduced another 10 per cent., and this he maintains will be effected.—*The Journal of the American Medical Association*, March 25, 1905.

WILLIAM F. BAKER, A. M., M. D.

MASTOID DISEASE COMPLICATING DIABETES MELLITUS.—In support of the view that the pathologic process in diabetes mellitus involving the organ of hearing begins as a primary osteitis of the mastoid process, extending secondarily to the tympanic cavity, Smith cites one case. The patient, a male, aged 41, had been suffering from diabetes for one year when he developed severe pain on the left side of the head and mastoid. A swelling developed immediately below the mastoid tip, gradually enlarged until it reached a point about an inch above the clavicle. Pain never was referred to the middle ear, and there was not at any time swelling or redness over the process, and the antrum and superior parts of the cell presented that dry, gangrenous or necrotic appearance so characteristic of the diabetic diathesis. The tip was bathed in pus, which covered a mass of foul-smelling granulation tissue. Smith concludes: 1. That aural complications of diabetes mellitus may be manifested by the classic mastoid symptoms without involving the tympanic cavity. 2. That this condition is peculiar to diabetes mellitus. 3. That the term "diabetic ear" should be limited to those cases in which the disease begins as a primary osteitis of the mastoid, or in which primary tympanic involvement and rapid mastoid complications seem simultaneous.

WILLIAM F. BAKER, A. M., M. D.

IS THE COMMON HOUSE FLY A FACTOR IN THE SPREAD OF TUBERCULOSIS.—J. O. Cobb draws attention to the fact that several observers have demonstrated that the fly may carry tubercle bacilli on its feet and in its stomach. This being true, it must be a dangerous source of infection among the poor when the food is left exposed to contamination by these insects. Data collected from all parts of the world prove that wherever people have tuberculosis they also have the fly as a pest. He insists that special effort should be directed to the destruction of all sputum, thus removing the sources of infection.—*American Medicine*, March 25, 1905.

ROOF GARDENS ON CITY PRIVATE HOUSES.—Some suggestions (with illustrations) are made by W. P. Northrup in regard to the utilization of the roofs of ordinary houses. Children often droop in the city because they cannot really live in the air, as do country children. In town they may go to the Park, but they must be dressed for it, the nurse must dress herself, and by the time all are ready to go out, the children may be too warm for their wraps. They are subjected in their outing to many street dangers, rarely remain out more than two hours, and often return home cross, tired and jaded. Northrup described the results obtained in the case of one family, the proper methods for getting the roofs ready, and various amusements which children may enter into properly under the conditions noted. The total expense of roof preparation in this special instance was about one hundred and fifty dollars. Wise nurses are required, and some moral courage on the part of the parents.

THE PURPOSE OF EYE GLASSES.—The conclusions of E. M. Alger are as follows: (1) Improvement of sight is only one function of glasses. (2) Relief of eyestrain is fully as important. (3) Eyestrain is often responsible for headaches and other reflex nerve phenomena. (4) One may have perfect vision and still be subject to eyestrain. (5) Small errors of refraction

often cause more strain than large ones, since there is a more constant effort to overcome them. (6) Strain can generally be relieved by properly fitted glasses. (7) Glasses which give the best vision may simply increase the strain, and therefore the patient cannot safely select his own glasses; as, furthermore, he will not buy of an optician glasses which do not improve vision, he very seldom gets the correct glass, and, therefore, fails of relief.—*Medical News*, March 25, 1905.

WILLIAM F. BAKER, A. M., M. D

APPENDICITIS AFTER OPERATION.—The degree of imperfect relief or of imperfect recovery after operation, and the complications which may attend operation and which may be regarded as accidental or independent of a direct surgical result of the case after appendicectomy are the subjects considered by Treves. In 45 patients examined by Treves and who complained that they were no better for the operation which had been performed in the quiescent period, the findings were as follows: Appendix imperfectly removed, 2 cases; ovarian trouble coexisting, 9 cases; persisting or relapsing colitis, 8 cases; persisting local pain, 7 cases; neurasthenia or hypochondriasis, 5 cases; continued attacks due to gallstones, 3 cases; due to colic, 2 cases; due to moveable kidney, 2 cases; due to renal calculus, 1 case; an unexplained cause, 1 case, and a tender mass in the right iliac fossa, 5 cases. The following imperfect results may follow the evacuation of a perityphilitic abscess: Persistent sinues, 40 per cent.; recurring abscesses, 24 per cent.; recurring attacks of appendicitis, 16 per cent.; fecal fistulae, 12 per cent.; inflammatory deposits in the iliac fossa, 8 per cent. Treves considers these figures of little value, as they do not represent the experience in practice of any one surgeon. Although Treves is of the opinion that the appendix should be removed in any case in which the least trouble is experienced, yet, he says, the following arguments may be urged against the establishment of the rule that in every case of abscess (in which the appendix has not been removed) it should be excised at the first convenient opportunity. 1. The most liberal estimate shows that 83 patients out of every 100 will never have another attack. 2. The risk of a second attack is comparatively small. 3. In these cases, in which the abscess has formed, although the operation is often easy, it is frequently not only very difficult but distinctly dangerous. 4. The evidence that an abscess has burst the bowel is not always conclusive. The discharge may be composed of long retained mucous. The following complications were met with in a series of 1,000 cases: Fecal fistula, 49 cases; thrombosis of the femoral vein, 12 cases; intestinal obstruction, 10 cases; broncho-pneumonia, 17 cases; pleurisy with effusion, 14 cases; without effusion, 2 cases; empyema, 7 cases; acute bronchitis, 4 cases; embolism, 1 case; non-suppurative parotitis, 4 cases; phlebitis, 4 cases; residual abscess, 11 cases; secondary abscess, 12 cases. In 6 of the 1,000 cases the appendicitis was associated with pregnancy. Of the total number of cases (1,000) 684 were males and 316 females. Operation was performed during the quiescent period on 364, 4 resulting fatally. In cases with local peritonitis but no pus, 38 operations were performed, with 5 deaths; in cases with abscess, 431 operations, with 35 deaths; in cases of general peritonitis with or without abscess, 166 operations, with 127 deaths. Of 264 cases of abscess and

general peritonitis further attacks were complained of in 27 cases, or 10.2 per cent.. Of 242 cases of operation during the quiescent period, further attacks were complained of in 4.5 per cent. Of 107 cases of abscess or of general peritonitis, in which the appendix was said to have been removed, only 6 complained of further attacks. In 122 cases in which the appendix was not removed 21 patients complained of further attacks.—*British Medical Journal*, March, 1905.

WILLIAM F. BAKER, A. M., M. D.

X-RAYS AND STERILITY.—F. Tilden Brown and Alfred T. Osgood have now recorded 18 cases of X-ray workers in whom azoospermia or otigo-necrospermia has been demonstrated. All of those examined who have done extensive X-ray work for several years (more than three) show no spermatozoa in their seminal fluid, while a few of the men who have been engaged in the work for a shorter time and have exercised care in avoiding direct exposure to the active tube show varying states of otigo-necrospermia. The sterility has been produced without the slightest subjective or objective sign denoting its development. The subjects have themselves noticed no change in size or consistency of the testicles.

The prognosis in these cases is still in abeyance and must remain so until evidence can be collected as to the recuperative power of these organs after months or years.

At present the only treatment is prophylaxis. Therefore all parts of the body not directly exposed for examination or treatment should be adequately protected; and the operator of the X-ray tubes should protect himself by working behind a screen impermeable to X-rays and only expose himself when absolutely necessary and then for the shortest possible time.—*American Journal of Surgery*, April, 1905.

J. D. ELLIOTT, M. D.

THE RESULT OF SPLENIC REMOVAL.—James W. Hunter, Jr., reports a splenectomy performed by himself and reviews the literature upon the subject.

From the results of experiments upon animals made principally by Patton, Fourin, and Warthin, he concludes that the lymphatic glands take up the work of the spleen, when it has been removed, and that after a few weeks or months the organism adjusts itself to the new conditions and no bad effects are felt. The statistics of splenectomy show a constant improvement. Bessel-Hagen reported up to the year 1900 a total of 358 cases of total extirpation of the spleen with 225 cures and 133 deaths, or a mortality of 37.2 per cent. He compares those cases which were operated upon up to the year 1890 with those from 1890 until 1900. In the former the death rate was 42.2 per cent. and in the latter only 18.9 per cent. Many cases which were formerly operated upon are now considered inoperable.

In cases of floating spleen, Fussell found 16, with 1 death; Bayer 27, with 2 deaths, and Bland Sulton, 20 cases (1877-1897), without a death.

In Hunter's case the temperature had suddenly risen; there was intense pain in the left iliac fossa and a hard tumor was made out on palpation. The tumor was so painful that a thorough examination could not be made. The bowels were opened with great difficulty. On opening the abdomen

the tumor was found to be the spleen, firmly bound to anterior abdominal wall and the intestines by adhesions and with its pedicle twisted, completely occluding the splenic artery. The spleen was of a semi-solid consistency, the capsule was greatly thickened and adherent, and could not be stripped off.

The microscopic examination revealed several old haemorrhages, as well as a large amount of pigment scattered throughout the mass. Much of the pulp was necrotic. In other words, there was a subacute inflammation of the capsule, a chronic passive hyperaemia of the pulp and a well advanced necrosis.—*The American Journal of the Medical Sciences*, April, 1905.

J. D. ELLIOTT, M. D.

TREATMENT OF PYELITIS.—H. A. Kelly reaches the following conclusions regarding the treatment of pyelitis: (1) It is important to take cognizance of a pyelitis of any grade whatever, as it may at times become a menace to the functional value of the kidney, or even to life itself. (2) The severer grades of the affection are often the sequels of a milder pyelitis of long standing. (3) The first step in the investigation is to determine the extent of the affection by estimating the amount of pus in the urine and the relative number of organisms. (4) It is important to determine the cause of infection, which is often of a mechanical nature, and therefore easily relieved. (5) By removing the cause the disease may either be cured or so far benefited that a subsequent complete relief by means of local treatments is easily brought about. (6) The milder forms are best treated by rest, abundant water, urotropin. (7) If there is not a speedy improvement, the next simplest plan of treatment is the catheterization of the kidney every two or three days for the purpose of evacuation, distention of the pelvis, irrigation and instillation. (8) Improvement should be measured by disappearance of pus from the urine and the diminution in the organisms, taking, say, three platinum loops as the measure in conveying the infected urine to the agar. (9) A patient improved but not cured (complete absence of bacteria) should be watched in the intervals of treatment and guarded with especial care in case of any intercurrent disease. Should such a disease supervene, urotropin is a good prophylactic. (10) The severer forms of the disease may be treated by irrigation, which often brings great temporary relief. As a rule, however, the kidney must be opened and drained; if it has been extensively diseased, remove it.—*Medical Record*, April 8, 1905.

J. D. ELLIOTT, M. D.

AFTER TREATMENT OF ABDOMINAL SECTIONS WITH ESERINE SALICYLATE.—In order to overcome post-operative intestinal paresis, D. H. Craig advises the use of eserine salicylate after every laparotomy, unless contraindicated by some condition requiring the intestines to be kept at rest. He has also found that it lessens the vomiting and thirst which so often follow operation. Atropine should always be used with the eserine as it counteracts all the undesirable effects of eserine and unites with it to increase intestinal peristalsis. The amount of eserine to be given varies from one-sixtieth to one-twentieth of a grain, depending upon the condition of the patient's

bowels, *i. e.*, whether normal or constipated and the degree of constipation. The dose can be early repeated if it is found to be inadequate.

The method of administration is of prime importance: 1-100 of a grain of atropine by the mouth one hour before or 1-150 of a grain subcutaneously immediately previous to the operation should be given. As soon as practicable after opening the peritoneum an examination of the field of operation should be made, and if no contra-indication to its use is discovered, the eserine should be immediately injected. The after-treatment of a laparotomy should be carried out in the usual manner, with the exception that a cathartic should not be given until it is especially indicated.

Only eserine (physostigmine) salicylate should be used and the best preparations are the hypodermic tablets of some thoroughly reliable maker, as a stock or operating room solution of the salicylate deteriorates in a very few hours and is unreliable and therefore dangerous.—*New York Medical Journal* and *Philadelphia Medical Journal*, March 18, 1905.

J. D. ELLIOTT, M. D.

MEDULLATED NERVE-FIBRES IN THE RETINA.—Mayerberg, after a microscopical study of three eyes in which medullated nerve-fibres had been observed during life, inclines to Von Hippel's view that the presence of these fibres is not a congenital anomaly, but is one which appears in eyes congenitally predisposed thereto. In almost all cases other congenital deviations from the normal are present. In the three cases described the retina was rudimentarily developed in the region of these fibres, and in one there was a duplicature of the retina at the margin of the optic nerve. There was also a growth of connective tissue on the internal limiting membrane which perhaps holds the same nutritive relation to the medullated nerve-fibres in the retina that the connective tissue sheaths of the bundles of fibres holds in the optic nerve. The presence of this connective tissue is congenital and in its peculiar association with the medullated fibres may be found the congenital predisposition to the development of the latter.—*Archives of Ophthalmology*.

WILLIAM SPENCER, M. D.

METHYL-ALCOHOL INTOXICATION.—This condition should be suspected in all cases with central scotoma and gastro-intestinal disturbances. Some individuals, certain druggists, are immune. Indulgence in ordinary alcohol does not lessen susceptibility to methyl-alcohol. The first grade of methyl-alcohol intoxication is mild with mild gastro-intestinal disturbances: it ends in recovery. The second has dizziness, marked gastric disturbances and dim vision which ends in blindness. In the third there is sudden overwhelming prostration, ending in coma and death. In typical cases there are central scotoma and blotting out of the peripheral field. In eight cases blindness followed breathing air contaminated by methyl-alcohol fumes. In sixty-two out of ninety-one cases death was not preceded by blindness. In a series of fifty-one cases only seven recovered. Amblyopia usually began at the end of twenty-four hours. Red ink, Jamaica ginger, and Columbian spirits contain methyl-alcohol; of eight persons drinking the last named, three will become blind and three will die.—*The Homœopath. Eye, Ear and Th. Journal*.

WILLIAM SPENCER, M. D.

BEER YEAST IN TREATMENT OF PHLYCTENULAR CONJUNCTIVITIS.—Ginestons has been experimenting with yeast in this affection because of the good results of yeast in treatment of various affections due to staphylococci. He found in the laboratory that this organism is the most frequent one found in phlyctenulae. Local application gave only uncertain results, and he then administered yeast internally in dry wafers in a daily dose of four grammes for an adult at the beginning of the two principal meals. He reports twenty-five cases, in each of which a striking improvement took place in a short time. Its use added to the ordinary local treatment, gave such excellent results that he believes it to be of the utmost value in phlyctenular ophthalmia.—*The Homœopath. Eye, Ear and Th. Journal*.

WILLIAM SPENCER, M. D.

CONGENITAL OPACITY OF THE CORNEA.—C. D. Marshall, London, gives an account of a case of congenital cornea opacities occurring in a male Jew baby, which was six years of age at the time of this observation. The condition was as follows: The right cornea was opaque, and beginning to become staphylomatous. The left cornea was likewise opaque, but was not bulging; it was so dense that the iris could only be made out on one side. There was no evidence of perforation. There was no history of ophthalmia monstrosium or perforation. The origin of this condition was probably intrauterine inflammation, leading both to faulty development of the eyes and also to destructive changes of the cornea itself.—*Ophthalmoscope*.

WILLIAM SPENCER, M. D.

DIABETES AND CATARACT EXTRACTION.—R. W. Doyne gives the following interesting clinical history of a case: A male, aged 77 years, who suffered from diabetes mellitus, having had a preliminary iridectomy performed two years previously, underwent extraction of cataract and died from diabetic coma thirteen days later. Three days after the extraction he became rather drowsy and gradually got worse. Notwithstanding this, the eye that had been operated upon made a perfect uninterrupted recovery, and the notes on the day of his death state that the wound was soundly healed and the eye was quiet.—*Ophthalmoscope*.

WILLIAM SPENCER, M. D.

PRESBYOPIA AT AN EARLY AGE. ASTIGMATIC ACCOMMODATION UNDER THE INFLUENCE OF ESERIN.—G. Kosher reports the case of a man 27 years of age whose refraction was R. 6-8; with +.75 cyl. ax 3 -6-6.; L. 6-6 emmetropic, but whose near point was 25 cm., even with one eye covered. He had an amplitude of accommodation of only 4 dioptries instead of 7.5 which corresponds to his age. Latent hypermetropia was carefully excluded. This condition persisted during an observation of twelve months. Eserin placed in the left conjunctival sac at first caused the pupil to become oval and displaced upward. At the end of half an hour the pupil was contracted and circular. At that time the voluntary accommodative effort made in that stage of the spasm caused by the eserine was able to contract the ciliary muscle so strongly as almost to reach the normal amplitude. The explanation suggested is that during contraction of the normal ciliary muscle an abnormal resistance was met with which could not be over-

come by the usual innervation alone, but could be with the aid of eserin.

During the action of the eserin in this case observations were made of the refractive changes which took place, and it was demonstrated that the eserin produced at first a symmetrical contraction, but later an unsymmetrical one. At the end of fifty minutes 2.50 dioptries of astigmatism were present and astigmatism persisted, though gradually diminishing until the effect of the drug had passed away.—*Archives of Ophthalmology*.

WILLIAM SPENCER, M. D.

THE TOLERANCE OF THE EYE TO FOREIGN BODIES WITHIN IT.—The author describes three cases of foreign body within the eyeball in which there were no symptoms and full normal vision was retained. In two of the cases the foreign body was iron, and in one case a small grain of shot. Thirty-four cases are tabulated from the literature in which iron or steel particles remained within the eyeball with little or no disturbance of vision; also thirteen similar cases with copper as the foreign body, four cases in which lead entered the eye, and finally one case in which the foreign body was wood and glass.

The tolerance of the eye to foreign bodies is dependent upon the size of the body, its aseptic condition, and its chemical action. Lead is the least, and copper the most dangerous substance to enter the eye. Next to the size of the body, encapsulation and position are of great importance.

An encapsulated body is not always powerless to cause further trouble. The cause of encapsulation is not definitely known. Copper seldom becomes encapsulated. For encapsulation, the position of the body is of importance. Iron situated in the tunics of the eyeball becomes more rapidly encapsulated than when situated in the vitreous.

Copper in the neighborhood of vascular structures exerts a greater and more dangerous chemical action than when in the vitreous, where the higher percentage of albumen minimizes this action. The action of lead is not yet well understood.—R Wurtz, Strassburg. *Annals of Ophthalmol*.

WILLIAM SPENCER, M. D.

THE LATEST ADVANCES IN OCULAR THERAPY.—At the last International Ophthalmological Congress in Lucerne, the consensus of opinion was, that local therapy in the form of sub-conjunctival injection, was for many forms of eye disease, a most curative measure. By the use of acoin, sub-conjunctival injections can be made without much pain. Darien devotes his paper not so much to the finding of new remedies to be used sub-conjunctivally, as to a study of the precise indications for the cases in which these injections should be used. He calls special attention to the fact that these injections are not to be considered a general panacea, but as a little surgical measure reserved for those cases only in which the simpler remedies fail, or when, for fear of complications, an intense and prompt action is desired. Sub-conjunctival injections produce their effect in three ways: 1. Local irritation, with exit of the aqueous humor through Schlemm's canal and the spaces of Fontana, due to the presence of the two fluids of different specific gravity (osmosis). 2. Hyperemia of the ciliary body is produced, and an aqueous humor richer in albumen and protective substances is secreted. 3. Finally, a condition of equilibrium is produced, which favors resorption.

Ophthalmologists have used sodium salicylate sub-conjunctivally in rheumatic affections of the eye, since 1891. Personally, Darier has done so but little, because of the difficulty in positively knowing that rheumatism is the cause, and because rheumatic affections of the eye yield as a rule to other more simple methods.

Another method of administration which commends itself is the intra-venous injection. This is less painful than the sub-cutaneous injection, much quicker and more certain in action, and since August, 1904, he has used daily intra-venous injections of sodium salicylate with the best results.

Bodal has recommended the use of potassium iodid solution dropped in the eye in cases of incipient cataract. Darier has little faith in the procedure, although he has seen vision improved by the long continued use of potass. iodid and sodium iodid aa. 15 aqua destillat 10., dropped frequently into the eye. He has also noticed that the extracted cataractous lens, after a prolonged use of these drops, seems smaller than it does in patients not so treated.

As yet there is no known medical remedy which dropped in the eye or taken internally, will absorb lens-opacities, although they sometimes disappear spontaneously.

In 1893 Darier experimented with 75 per cent. solution sub-conjunctivally, but the results were very doubtful and unsatisfactory. Bordereau, of Madrid, however, has seen lens opacities clear up after a few sub-conjunctival injections of potassium iodid. In cases of iritis and glaucoma, Schiele has observed a great lessening of pain and a reduction of tension after the sub-conjunctival injection of a 1 per cent. solution of sodium salicylate.

As an indication for the use of sub-conjunctival injections, Darier mentions traumatic infection of the cornea, with erosion of epithelium and extensive infiltration. In such cases dionin is first used, dropped in the eye in combination with cocain and solution of cyanide of mercury, 1-1000. If the infection is brought to a standstill by the next day, these drops are continued; if, on the other hand, the process progresses, sub-conjunctival injection is then indicated. For injection, Darier uses either salt solution, solution of sodium salicylate, or alcohol 15. with water 85. parts.

Alcohol as an injection is well spoken of. It does not cause much pain, is quickly absorbed and causes but little reaction. Furthermore, it can be used to dissolve substances for injection, not soluble in water. Darier has experimented with serum injections and finds them very efficacious.—A. Darier, Paris. *Annals of Ophthalmol.*

WILLIAM SPENCER, M. D.

THE CAUSE OF CATARACT.—For four years *Dr. E. D. Reed* has been investigating the cause of cataract in the homeopathic laboratory of Michigan University. An application of the methods applied to the study of other colloids gave results which show the lens and the refractive media to be the subject of the same laws which govern typical colloids. It was further shown that the lens substance, by proper treatment, can be made to reach a critical point where very minute portions of electrolysis, namely, the Kations, cause coagulation and opacity. It was also demonstrated that the lens capsule, being a semi-permeable membrane, is a very important factor in keeping the colloidal substance of the lens in a state of equilib-

rium. Amounts of substances which have decided effect upon the lens substance itself are inactive on the lens within its capsule. The slightest injury to the capsule, effecting its role as a semi-permeable membrane, causes rapid and marked change in the lens substance.—*The Homeopath. Eye, Ear and Throat Journal*.

WILLIAM SPENCER, M. D.

THE DIAGNOSIS DURING THE FIRST HALF OF PREGNANCY.—*Sarwey* calls attention to the frequency with which difficulties appear to attend this subject, judging from the numerous errors made. This seems to be especially true of pregnancy between the third and fifth month. During the first half of pregnancy there are believed to be no positive signs of pregnancy, and the probable signs are often unreliable. He discusses the circumstances which cause this unreliability and make difficult the differential diagnosis. It would therefore be of much practical value did we possess a reliable and regularly demonstrable sign before the end of the fifth month. *Olshausen* recalls the observations of *Depaul* and *Nagele* according to which sounds caused by the fetal motions can be heard toward the end of the fourth month, but *Sarwey* has only exceptionally been able to recognize the fetal motions as such between the sixteenth and twentieth week. From a rather extensive clinical experience the author claims to be able to hear the fetal heart sounds at the thirteenth week, and in one doubtful case he recognized these sounds in the twelfth week. He acknowledges it to be not easy to do this, and some precautionary measures are essential. It is necessary to possess acute hearing, trained by practice; the patient also must be in absolute rest; the examination must be made in absolute silence, all noises, even the ticking of a clock must be removed from the examining room; the main prerequisite, however, is an untiring patience. He believes the lack of this requisite patience is the reason why most authors believe the fetal heart sounds can only be heard in the middle of pregnancy. In some instances twenty or thirty minutes have been required before the auscultatory examination was successful. The examination is made difficult not only because the heart sounds are not very distinct, but also because the area where they may be heard is so circumscribed, and moreover the locality often changes. He has most frequently heard the sounds over the site of the future lower uterine segment, and advises to seek for them just above the symphysis, or to begin at this point and examine the entire uterine surface.—*Zentralbl. f. Gyn.*, 1904-1156.

THEODORE J. GRAMM, M. D.

THE PATHOLOGICAL ANATOMY AND PATHOGENESIS OF THE TOXAEMIA OF PREGNANCY.—Under this title *Ewing* (New York) calls attention to the three clinical manifestations of the toxæmia of pregnancy, pernicious vomiting, eclampsia, and acute yellow atrophy of the liver. In each of these the tissue changes in the liver bear a certain similarity to each other, and consist essentially in granular and fatty degeneration and necrosis in foci. The exact nature of the disturbances of nitrogenous metabolism which is responsible for the clinical manifestations of the toxæmia of pregnancy is a failure of oxidizing capacity on the part of the liver. For this reason, the proteid derivatives, principally amido-acids and ammonia, which are

normally combined by the liver into urea, are no longer combined but circulate free in the blood in poisonous form, and are to some extent excreted by the kidneys. Other proteid derivatives, as those containing sulphur, fail to be oxidized and these doubtless contribute to the toxæmia. The exact identity of the poisons has not been determined, for they are probably very various and apparently not fully accessible to present clinical and biological methods, but there is no doubt about their existence in the blood and their action upon the viscera. The present view of the nature of the toxæmia of pregnancy classes the disease as a functional disturbance of the liver, usually but not necessarily attended by severe anatomical lesions of this organ, and secondarily, with functional disturbance and anatomical lesions of the kidneys and other organs. As the morbid process is originally a functional disturbance of the liver, its intensity is not entirely dependent on any anatomical changes in the organ, and hence we find some fatal cases with minimal lesions of the liver. The relation of these lesions to the loss of oxidative capacity of the liver cannot at present be fully explained. The anatomical lesions certainly follow and do not precede the disturbance of function, and there may very well be several steps between the loss of oxidizing capacity, and the hydrolysis, fatty degeneration, and necrosis of the liver cells. From the viscosity of the blood in eclampsia, and the post-mortem discovery of unabsorbed saline solution in the colon, the author suggests the intra venous use of the salt solution. The pathological study of these cases shows the absence of a necessarily fatal character in the disease. If the poison can be eliminated or its further production prevented, there is nothing in the majority of the lesions which is incompatible with life. Hence the indications are for energetic treatment upon the rational basis that the disease is an auto-intoxication.—*Amer. Jr. Obs.* Vol. 51-145.

THEODORE J. GRAMM, M. D.

EXPERIENCES WITH TUBAL PREGNANCY.—Zuntz has published the experiences had with 100 cases of tubal pregnancy at the Moabite Hospital at Berlin. These cases represent 2.9 per cent. of the cases treated during eight years; 19 per cent. of the cases were due to gonorrhoea. In about 38 per cent. there had been puerperal infection, previous abortions, leucorrhoea, disturbances of menstruation, also salpingitis and evidences of perimetritis. The average age of the patients was 31 years. Thirteen of his cases were nulliparae. Twenty-six cases had had one or more abortions preceding. A long period usually intervened between the last pregnancy and the ectopic gestation, averaging more than three years. Recurrent ectopic gestation is an occurrence now well established by observation, and this author had three cases. There were eight cases of simultaneous intra and extra uterine gestation. Common errors of diagnosis are to mistake the tubal pregnancy for a tumor of the adnexa, or to diagnose the case as a normal pregnancy with an adnexal tumor. The diagnosis is also complicated by the fact that the period was not absent or was apparently not absent. In about one-third of the cases the internal hemorrhage occurred within four weeks of the last period. It is quite remarkable that this author only observed the discharge of a decidua in three cases. The patients were operated mostly by abdominal section, some by the vaginal route. The latter is

always indicated when the hematocele has become purulent.—*Arch. f. Gyn.* Vol. 73-22.

THEODORE J. GRAMM, M. D.

CHRONIC INVERSION OF THE UTERUS.—Thomson (Odessa) says: Cases of chronic inversion of the uterus are so rare, and those treated conservatively are so seldom met with, that every such case should be published. He describes the case of a 21-year-old woman who one year before had been spontaneously delivered. Three hours subsequent to delivery the placenta came away after the patient had taken some medicine. She subsequently suffered from pain, fever and hemorrhage. When this observer saw the case, there was found an egg-shaped tumor in the vagina, becoming smaller above and disappearing within a ring of tissue in the upper vagina. In place of the fundus, a cavity was felt above. The tumor was painful to touch and bled easily. After ineffectual attempts at replacement, the patient was operated according to Küstner. A transverse incision was made in the posterior vaginal wall and a finger introduced into the funnel-shaped inversion, but even yet reinversion was not possible. Therefore the posterior inverted uterine wall was incised from the vagina for a length of about 3 cm. The incised edges of the uterus were grasped with forceps introduced into the abdominal cavity through the posterior vaginal incision, and then by traction and simultaneous pressure from below the fundus uteri was reinverted with surprising ease and turned down into the vaginal incision. Some intra-peritoneal adhesions were separated, the uterine wound closed with sutures and the uterus replaced. The vaginal incision was drained with a strip of iodoform gauze and sutured, after which a vaginal tampon was inserted, thus completing an operation which proved to be entirely successful.—*Zentralbl. f. Gyn.*, 1904, 1513.

THEODORE J. GRAMM, M. D.

A CASE OF ADVANCED ECTOPIC GESTATION.—Lingen (St. Petersburg) has published the interesting details of a case of tubal pregnancy existing for nearly a year. The patient, aged 37 years, had had one miscarriage and one normal birth fifteen years before. She was anaemic, greatly emaciated, having a large abdominal tumor composed of two lobes, and she added to the difficulties of the diagnosis by her ignorance and by denying the possibility of pregnancy. At the operation a glistening, whitish sac was encountered, apparently not very extensively adherent, which contained a male fetus, somewhat macerated. This fetal sac was continuous by an hour-glass contraction with another cavity nearer the uterus which contained the placenta. The fetus with its sac and the placenta was successfully removed, when it was found that the conception had taken place and developed in the left Fallopian tube. The uterus was found anteflexed and lay below and in front of the mass. The patient made a satisfactory recovery.—*Zentralbl. f. Gyn.* 1904, 1546.

THEODORE J. GRAMM, M. D.

HEMORRHAGE INTO THE BLADDER DURING PREGNANCY.—Kubinyi (Budapest) reports the case of a woman pregnant for eight months who had a dangerous hemorrhage into the bladder. This occurrence though rare is

not surprising in view of the tremendous engorgement of the pelvis during the later months of pregnancy. In this instance the hemorrhage seemed to result from lifting a heavy weight. The patient was 32 years old, had previously had two miscarriages and four normal deliveries. After the injury during lifting she passed bloody urine, and then for three days none at all, and neither was the catheter successful in removing any. When brought to the clinic the patient was collapsed. In the abdomen was felt a large, highly sensitive tumor in front of the pregnant uterus, formed by the bladder filled to bursting. The anterior vaginal wall was prolapsed and this region was soft and doughy, while from the urethra dribbled a thick bloody fluid. The catheter failed to empty the bladder. A male catheter only gave exit to a small quantity of dark blood. A curved tube with large lumen through which a double current could flow only evacuated some more offensive dark blood. The urethra was then dilated up to No. 16 of Hegar's dilators and a finger introduced which felt and displaced the blood clots occluding the urethral opening. After accomplishing this it became possible by means of an irrigator to remove about a half liter of blood and several liters of urine. Further irrigation cleansed the bladder entirely. A subsequent cystoscopic examination disclosed the site of the hemorrhage to have been on the anterior wall of the bladder.—*Zentralbl. f. Gyn.* 1904, 1473.

THEODORE J. GRAMM, M. D.

PUERPERAL SEPTICAEMIA IN PRIVATE PRACTICE.—Warren (Portland, Me.), has considered this subject from several points of view, and says: This paper was begun in the hope that it might be possible to give a favorable answer to the question: How does puerperal septicaemia in private practice to-day compare in frequency with the disease under similar conditions a generation ago? Judging from the statistics at hand it does not seem possible that the question can be answered. It demands more extended research than the author can give to the subject. This much, however, may be said with fairness, for theoretical and practical reasons it appears, that the nearer the obstetrician is to his graduation the better is his technique and the cleaner is his record. After all, the question is of less importance than the greater one: What prospect is there that puerperal infection will ever be put an end to? It would appear that the answer must depend in great measure upon the character of the professional training, which the coming generation of obstetricians will receive both at the school and bedside. Judging from present conditions it is not to be expected that general practitioners of to-day will vary much from their present habits and prejudices, or that the ordinary midwife will ever do clean work. It has been demonstrated without question that the hazard of infection has been eliminated from public midwifery. The most important problem of obstetrics to-day is: How can the protective method of delivery, as illustrated in the maternity, be made obligatory in private practice? Its solution depends upon the scholastic training of the future. By the teaching of the universal principles of asepsis in the school, and by observation of its practical application in the clinic, the student will enter upon the active practice so firmly confident in the protective method of delivery that he will have neither inducement nor wish to use any other. The future midwife will be controlled by legislation, and required to fit herself for her duty by systematic

study, just as is now the custom in Europe. To reach this desideratum, universal asepsis in midwifery, the profession of to-day should preach and practice.—*Amer. Jr. Obs.* Vol. 51, 301.

THEODORE J. GRAMM, M. D.

CONGENITAL OBLITERATION OF THE BILE DUCTS.—This case is reported by Prof. J. P. Crozer Griffith. The child died on the 10th day and the obliteration was found in the common bile duct, about a quarter of an inch above its opening into the intestine. The obliteration may be present at various points along the course of the ducts and there may be complete absence of some of the structures. In cases of longer standing hypertrophic cirrhosis of the liver develops.

In some cases the cause is arrest of embryonic development, in others it appears to be distinctly inflammatory in origin.

The chief symptom is icterus. This may develop early or later; usually in the first days, but it may be present at birth or not develop for several months.

The next symptom of importance is acholic stools. The urine is intensely bile stained. There is no fever. Vomiting is common. A characteristic symptom is hemorrhage from the umbilical cord and into various parts of the body. Death occurs in convulsions or sopor, or from exhaustion. The children usually live for several weeks, or even months. The prognosis is hopeless and all treatment futile.—*Archives of Pediatrics*, April, 1905.

C. SIGMUND RAUE, M. D.

OSTEOARTHRITIS OF THE SPINE.—The history of a case is reported by H. F. Stoll, his patient being a baker, aged thirty-eight years, who ten months before admission to hospital noted "heavy" feeling in the small of the back. Later came cramps in thighs and legs. At first the pains were felt on waking and would wear off as the patient "limbered up," but later became constant. Then appeared a swelling of the right hip, and the pains grew so severe that he was frequently obliged to rest while on the street. On admission to the hospital it was noted that the right hip was so held that there appeared to be considerable fullness extending from the crest of the ileum to the right trochanter major. The gluteal folds were equal. There was a double scoliosis, the smaller one with its concavity to the right being in the upper dorsal regions. Flexion of the vertebral column was much limited, especially in the lower half of the dorsal and lumbar regions. Flexion to the left was normal, but much limited to the right. Extension was also somewhat limited. When in dorsal decubitus being rotated outward. There was no shortening of the legs and no atrophy. There was no limitation of movement at the hip joint, nor were there any tenderness over the sciatic nerve. The prominence observed over the right hip when erect was not present in ventral decubitus. The knee jerks were equal and exaggerated. There was no ankle clonus. The heart, lungs, and abdomen were negative. A plaster jacket was applied and there was a marked relief of the pains. The scoliosis disappeared, and he was able to walk without difficulty. Discontinuance of the jacket (which was renewed from time to time) led to a reappearance of symptoms which went away as soon as its use was resumed.

INDICATIONS FOR TREATMENT OF GASTRIC HEMORRHAGE.—F. Gregory Connell discusses the subject of gastric symptomatic hematemesis. Prophylaxis is the only rational treatment; that is in chronic ulcer radical cure should be instituted before hemorrhage comes on. In the acute symptomatic or non-symptomatic variety, indications for treatment are not so definite. It may be difficult even at autopsy to determine its cause. After the single acute hemorrhages of either the symptomatic or non-symptomatic variety, medical treatment is usually advocated and instituted. It must be remembered, however, that the amount of blood vomited is no indication of the amount of hemorrhage, as considerable may pass into the bowels. The majority of acute single hemorrhages are capillary oozings, and many cease as spontaneously as they begin; hence palliative treatment is indicated. After acute multiple hemorrhages the question of surgical intervention comes in. Drawbacks to operations at this time are (1) the patient is in poor condition to go through a major operation and (2) that cases do recover after repeated profuse attacks of hematemesis under palliative measures. The author sums up by saying that it may be stated as a general proposition that after a single hemorrhage, palliative treatment is indicated; after three or more hemorrhages, surgery should be resorted to. As to the proper line of treatment to be instituted after a second acute hematemesis, there can be found a great diversity of views. In general the greater number of operators have, up to the present time, advocated a waiting policy, and a building up medical treatment in hope that the hemorrhage would not be repeated.—*New York Medical Journal*, March 25, 1905.

WILLIAM F. BAKER, A. M., M. D.

RHEUMATOID ARTHRITIS.—Orr speaks in favor of the treatment instituted by Balfour in 1893. Since that time he has treated a considerable number of patients in various stages of the disease, and no treatment compares in successful results with Balfour's. In many cases a considerable amount of good can be done in the way of alleviating suffering, preventing deformity and restoring the use of the limbs, and in some cases a cure is effected. The treatment consists of dieting, internal medication (the administration of arsenic and iron in small doses for a period of three weeks out of every month) and counter-irritation carried out by the employment of blisters. He advises continuing the treatment for two, three or more years, according to the extent and severity of the disease.—*Practitioner*, London, Eng.

WILLIAM F. BAKER, A. M., M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

CHININUM ARSENICOSUM IN DIARRHOEA.—One of our exchanges says that for simple diarrhoea, with no special symptoms, *chininum arsenicosum* 6x. is the remedy. It would be somewhat better to say that this remedy is characterized by weakness and prostration, with disinclination for either mental or physical exertion. That it corresponds well to many cases of gastric pain due to ingestion of heavy food or unripe fruit. That sometimes its stools are thin, brown and painless; evacuated in one prolonged gush. That it also has an early morning watery stool, brownish, and containing yellow-like lumps; the desire for stool coming on suddenly and while dressing. That it also has a fecal stool, containing mucous and some blood, preceded and followed by tenesmus. That it also suits a hard stool, difficult of expulsion unless the finger is pressed against the region of the coccyx, to assist in its expulsion. It is a good remedy to add to one's armamentarium for the diarrhoeas of the coming summer season, but needs differentiation as do all remedies.

SILICEA AND ITS PECULIAR EFFECTS.—Dr. J. N. Majumdar, in *Indian Homœopathic Review*, claims that Silicea possesses the power of driving foreign substances out of the human body. While treating a case of malarial fever, he happened to prescribe Silicea for the patient. This remedy did not influence the malarial disease, but after two days' use, the doctor observed that his patient had developed small abscesses over the body. Inquiry elicited the fact that the boy had, some years ago, met with an accident from the bursting of a soda water bottle which he was opening. Many small pieces of glass had pierced the body. The larger ones had been removed by a surgeon, but the smaller fragments had remained. It seemed that the abscesses had formed in the locations where the glass had entered. In a few days more, the abscesses opened and small bits of glass were discharged through the openings. After this, the wounds rapidly healed again. The author attributes this to the Silicea and mentions other cases which he believes tend to confirm his opinion.

CONDURANGO IN GASTRIC CARCINOMA.—Dr. W. K. Clark reports a case in *Alkaloidal Clinic* that is suggestive. The carcinoma of the pyloric end of the stomach was confirmed by exploratory incision. The patient, however, declined operation. Fluid extract of Condurango was administered in half-

teaspoonful doses every four hours. This dose was gradually increased to two teaspoonfuls. After six months' treatment, the patient had regained her normal weight and all symptoms had disappeared.—(*Medical Forum.*)

AN IMPROVED CULTURE MEDIUM FOR BACILLUS TUBERCULOSIS.—Dr. E. M. Perdue, in *Medical Forum*, announces a new medium for the growth of tubercle bacilli, which has been developed in the laboratory of the Hahnemann Medical College of Kansas City. Heretofore the great trial to the patience of investigators has been the slowness of the growth. With this new medium, the growth is rapid. The streak appearing to the naked eye within twenty-four hours. It is no longer necessary to incubate a week, and then use a magnifying glass to see the streak of isolated colonies. The formula for the new medium is as follows:

500 c. c. water,

3 grams extract of beef.

Boil, set aside and cool, then filter. Add:

10 grams peptone,

5 grams sodium chloride,

5 grams potassium phosphate.

Heat till thoroughly dissolved.

500 c. c. water,

15 grams of agar-agar.

Boil till thoroughly dissolved; pour both preparations together; add 60 c. c. glycerine, and make up to 1,000 c. c. with water; make slightly alkaline with sodium hydrate; boil and filter twice through absorbent cotton into flasks; sterilize and tube.

The same culture medium, minus the glycerine, is being used in cultivating other bacteria; and with marked success.

AESCULUS HIPPOCASTANUM, ITS INDICATIONS IN HEMORRHOIDS.—If the following symptoms are present, aesculus will be found to be a curative remedy in hemorrhoidal complaints. The tumors may be either internal or protruding. They are hard, purple and very *sore*. (A bruised feeling rather than the rawness of aloes.) They ache and burn, but rarely bleed. The rectal symptoms accompanying the hemorrhoids are numerous. There will be dryness, soreness, constriction and fullness. The sensation as if sticks, gravel, splinters or other foreign bodies had been lodged in the rectum, is very characteristic of the aesculus. The feeling of fullness and protrusion is also accompanied by tenesmus, and desire to strain. Actual *constipation* is not marked, as a usual condition, in the aesculus case. This point might assist us to differentiate the remedy from others. Usually, the stool is soft; often quite loose, pale or dark; rarely, if ever, large, hard, dry or scybalous. Constipation does, however, appear in the pathogenesis of aesculus; a hard, knotty stool, that is usually *white* or light colored. (Nux has *dark*, hard, knotty stools.) We may also remember the tendency towards prolapsis-ani in aesculus; and, its remarkably severe backache. Lameness as if strained, aching, weakness; much worse by walking, stooping or any movement. This pain may, like Rhus pains, disappear upon continued motion. These excellent indications and others, may be found in detail in article upon Aesculus by Dr. Douglass in *American Physician*.

FACIAL PARALYSIS CURED BY RHUS TOX.—Dr. Majundar reports the case of a robust man, aged 32 years, who after being exposed to rain and cold one July evening, developed facial paralysis. The right eye lid could not be closed, the face was drawn to the left side. The patient complained of alternate heat and chilliness, and there were bruised sensations throughout the body. *Rhus toxicodendron* 30., restored him to health in four or five days.—*Indian Homœopathic Review*.

THE TREATMENT OF SYPHILIS AT THE THERMAL SPRINGS.—It is probable that the particular virtue of the thermal bath in the treatment of syphilitic affections lies in its power to facilitate the use of mercury by inunction. The thermal bath softens the epidermis, dilates the orifices of the glands, and so facilitates the absorption of the specific medicament.—*Hospital*.

THE HAHNEMANN DOCUMENTS.—We particularly commend to our readers the Hahnemann Documents, as arranged by Dr. Clarke, in April *Homœopathic World*. There are most interesting letters from Hahnemann to Boenninghausen, Stapf, Von Gersdorff, Von Brunnow, Hering, and others, that will repay careful reading. Our alumnus, Dr. Richard Haehl, of Stuttgart, who has done so much to clear up the many details respecting the literary work left by Hahnemann, says that some of the letters published by Dr. Clarke have never before been published. This gives them an additional interest.

TYPHOID FEVER AND ITS TREATMENT.—Dr. Bowser, in *North American Journal of Homœopathy*, has given the results of treatment of 240 cases of typhoid fever. He had only four deaths. It will be interesting to follow the line of treatment used by this physician, as his indications differ in some minor details from those usually given. For the early symptoms and in very mild cases, *Bryonia*, one drachm to half glass water. Tea-spoonful every two hours. (Strength of preparation not mentioned.)

Arsenicum.—The author thinks that most of his cases are complicated by malarial poisoning at the beginning, so he gives arsenicum album, in alternation with the typhoid remedy. This remedy is continued until convalescence as a protection against hemorrhage from the bowels. He has never had a case of hemorrhage and attributes this fact to the use of the arsenicum. The further indications calling for arsenicum are: High temperature and rapid pulse, bloody, foul-smelling stool, clean or black tongue, threatening collapse during the night, emaciation and prostration, bed sores and restlessness.

Rhus Toxicodendron.—We have a red tongue, high fever, rapid pulse, delirium, or the mind delays in answering questions, protrudes tongue very slowly, sad and restless, lips parched, bronchia involved, diarrhoea, cheeks look livid or purplish, all symptoms worse at night.

Phosphorus.—"A sheet anchor when pneumonia is involved." (Pneumonia present.)

Baptisia.—When the patient is fretful, keeps up continual lamentations, as if in dire distress; one drop of the tincture every ten minutes for one hour or until perspiration is started.

Belladonna.—When the tongue looks like a piece of sole-leather, eyes are bright and wild, face red, patient becomes furious.

Creosote.—When tubercular phthisis follows in the path of typhoid fever. Of this type the author has had but one case. She made a successful recovery.

Muriatic Acid.—Diluted and applied to the bed sores. The author also uses it internally. These remedies are the main ones used by Dr. Bowser in typhoid fever. He orders the clothing of the patient and the bed linen changed every morning. A cold sponge bath is given every three or four hours during the continuance of the fever. Sweet milk, buttermilk, beef broth or chicken broth were administered frequently and in small quantities. This treatment is very simple, the adjuvants used were few, the remedies were evidently selected without very careful differentiation of symptoms; and yet the author's statistics are brilliant. If all of our practitioners would keep careful records of their cases and from time to time publish the results of their methods of using the homœopathic medicaments, we should have some very interesting facts at our disposal within a few years.

SILICA FOR MEIBOMIAN CYSTS.—Of course the easiest way is to incise a tarsal cyst of this sort and clean it out. But occasionally we meet with a patient who cannot be persuaded to allow us to resort to this simple method. When we are obliged to treat the cysts by internal remedies, it is often perplexing to know just how to select the remedy. Upon the indications naturally, but in such cases, we are sometimes at a loss to know just where the indications are. The experiences of many justify the statement that very often the most promising remedy is *Silica* 30. It may take a month or two, but as long as the tumor steadily diminishes in size and as long as the symptoms of conjunctival irritation are lessening, persist with the occasional dose of silica. If you fail, report your failures and *vice-versa*. You will have more successes to report than failures.

FERRUM PICRICUM IN OTITIS EXTERNA.—A woman who had been annoyed for some time by a dry eczema of the auditory canal, with much itching, developed a diffused inflammation of the canal which was very severe and painful. After this had subsided she had one *boil* after another in rapid succession. Of course they were incised. An application of oil of sweet almonds containing cocaine and atropine was of some use in assuaging pain; but no remedy seemed able to prevent the development of new boils until *Ferrum picricum* 3*r*. was prescribed. This remedy really seemed to put an end to the whole inflammatory process. The eczema remains cured. It seemed to disappear with the advent of the severe inflammation.

THE VALUE OF ARSENICUM IN PERIODICAL NEURALGIAS.—A lady of advanced years had suffered from a facial neuralgia for several weeks. During the daytime she was perfectly free from pain; but every night the pain returned and murdered sleep. It was necessary for her to rise and walk about, to apply chloroform liniment, and, in many different ways, endeavor to assuage the suffering. We tried to get the characteristic

symptoms. Was the pain sharp? No. Was it burning? No. Finally it was described as an "aching pain" situated deep in the bones of the face. Or, so it seemed to the woman. At one time it would appear just in front of the left ear. Again under the left eye. At another time over the left cheek bone. Always upon the left side, but seldom reappearing in exactly the same locality as previously. Nothing relieved it. No aggravating circumstances save night, after retiring; or, during the night, waking from sleep. *Spigelia*, *Verbascum*, *Mercurius* and other remedies all failed. *Anodynes* had failed in the beginning of the attack, and so had the coal-tar derivatives, so there was nothing for us to do but to try to find the *similimum*. A search for the *cause* failed to help. The eye, ear, nose and so on were not at fault. After a couple of weeks, it was observed that the pain began to recur at exactly *one o'clock* in the morning, that it necessitated rising and *walking* about, that *warmth* seemed to be more relieving than anything else. These peculiarities, taken together with the persistency and the periodicity, seemed to justify a trial of *Arsenicum*. As usually happens, when one succeeds in finding the "indicated," a dose or two of the 3x. trituration of *Arsenicum album* ended this story of suffering and nightly torment. This simple narrative exemplifies what is happening every day in the experiences of practitioners. It was not until two weeks had passed that the symptoms became clear enough for a rational interpretation of them; and we feel that the great variety of drugs and adjuvants, previously used, had something to do with this mixed-up symptom picture. If it were not for the law of *similars*, what would we do?

EPIDEMIC INFANTILE DIARRHOEA AND ITS TREATMENT.—Edmund Capper, M. D., in *Journal of Surgery, Gynecology and Obstetrics*, relates his experiences in two epidemics of infantile diarrhoea. His mortality was between three and a half and four per cent. After referring to the various usual methods of feeding and caring for such cases, the author speaks of lavage and intestinal irrigation, only to say that he has preferred to use a physiological dose of some cathartic such as castor oil or calomel. The paper concludes with some clinical hints in regard to the selection of the homœopathic remedy for such conditions.

Arethusa synapium, suited cases exhibiting sudden curdy vomiting immediately after feeding, followed by great collapse. *Arsenicum album* is indicated for small stools; dark, offensive and accompanied by prostration. Constant thirst for small quantities and vomiting immediately after ingestion of food also were present. *Chamomilla* was given frequently for oversensitiveness. *China off*, very important when there were lienteric stools, painless and just after a meal. *Croton tiglium* was given for the gushing stool, but as *Thuja*, *gratiola*, *elaterium*, *podophyllum* and *jatropha* share this characteristic, differentiation becomes necessary. *Croton tig*, yellow stool, watery, expelled suddenly; aggravated by food or drink. *Thuja*, similar stool, but ejected with more gurgling. There is also gurgling when drinking. Rapid emaciation is very characteristic here and the remedy suits more chronic cases. *Gratiola* has more nausea and there is no particular aggravation after food. *Podophyllum* has much the same stool without pain. The rolling of the head, moaning during sleep and prolapsus ani help in its selection. *Jatropha*, the gushing stool is accompanied by pros-

tration, cramps, coldness and flatulence. Watery albuminous vomiting is another strong indication. *Leptandra*, stools are black, tar-like and fetid. *Mercurius soubilis* and *corrosivus*, straining with bloody stools and tenesmus of the bladder. *Magnesia carbonica*, green stools that have a sour odor like Ipecac. In the latter remedy, the persistent nausea is the feature. *Veratrum album*, similar to jatropa, is indicated by severe pain, forcible evacuation, followed by great prostration. The stools are profuse. The third centesimal dilution of podophyllum is said to be superior in its effects to other preparations of that remedy.

NOTES ON SOME GRAVE FORMS OF RHEUMATISM.—Dr. F. Gisevius, in a letter to the *New England Medical Gazette*, says that in grave cases of hyperpyretic rheumatic arthritis with threatening meningeal symptoms, he has found *Chininum sulph.* 2x. in half grain doses, and *Chininum arsen.* 3x., together with lukewarm baths, of striking efficacy. This observer found salicylic acid useless in such cases. This fact has been referred to in a somewhat different manner, by Dr. Jousset. The latter physician wrote in his Practice: "In strong doses, chininum sulph., like sodium salicylate, is a dangerous drug; exposing the patients to the dangers of sudden death and to cerebral rheumatism." In small doses of the 1x. trituration, it does not inconvenience and is the best remedy in articular rheumatism. Indeed, Jousset seems to regard the treatment of acute rheumatic fever to be such a simple matter as the administration of Aconitum at first, followed by either Bryonia or Chininum sulph. later, according to the symptoms then presented. This treatment will perhaps not answer for all cases of rheumatism, as we see that disease in this country, but during the past winter we have seen several quite formidable cases of acute rheumatic fever, and in each of these the only remedy that was needed to carry the case to complete convalescence was tincture of aconitum napellus. Once before we have had a similar experience, the aconitum seeming to be the *genus epidemicus*. Dr. Gisevius also refers to a severe form of rheumatism following certain forms of tonsilitis. In several such instances he was led to use *Lachesis* 30., with striking results. The usual lachesis indications were present such as: Aggravation after sleep, sensitiveness of the epigastrium and neck, abnormal fetor of stools and nosebleed. In somewhat similar cases, *Anthracinum* 30., has proved most helpful. Dr. Jousset has always insisted upon the efficacy of the *tincture* of Aconitum in acute rheumatic fever; and this, like many more of his observations, will be found to be very accurate and reliable.

EXOPTHALMIC GOITRE.—Dr. N. R. Perkins claims that "medicine has as yet done but little for this disease." He reports good results from the X-ray treatments. We must take exception to this sentiment. Of course, if one relies solely upon the expressions found in allopathic works, the prognosis is not good in exophthalmic goitre; but, every physician, who has treated this disease persistently and carefully according to homœopathic methods, will, we believe, agree with us when we claim that the affection can be cured very often by such remedies as *Lycopus*, *Pulsatilla*, *Sulphur*, *Belladonna* and others. We feel like expressing the opinion that few if any cases will resist entirely the influence of homœopathic

medication, assisted by suitable hygienic measures. Those cases not cured will at least be much ameliorated.

GASTRIC ULCER.—Is gastric pain when the stomach is empty a nervous phenomenon? According to Dr. I. Ehrlich it may frequently be considered such, but in his experience it is oftener a symptom of ulcer and should attract attention diagnostically. He cites numerous cases where this "empty stomach pain" was verified as accompanying gastric ulcer though all other symptoms were absent.—*Münchener Med. Wochenschrift*.

FOREIGN LITERATURE.

CONDUCTED BY P. W. SHEDD, M. D.

New York City.

HOMŒOPATHY IN BRAZIL.—The capital of Brazil, Rio Janeiro, contains 30 practicing homœopaths and 15 pharmacies exclusively homœopathic. The progressive Brazilians have a well-established and prosperous medical society, "The Hahnemann Institute of Brazil," and publish an excellent monthly journal, *Annals de Medicina Homœopathica*." In 1902 Gen. Mallet, Minister of War, placed wards of the Military Hospital under homœopathic care. This service, under the direction of Drs. Meirelles and Auletta, has given remarkable results. Of 1328 patients treated homœopathically, but 35 died, a mortality of 2.7 per cent. The allopathic mortality in the same hospital was 3.4 per cent.—*Journal Belge d' Homœopathie*.

DIURNAL ENURESIS OF ADULTS: CHINA.—Dr. Van den Neucker gives the preference in the treatment of diurnal incontinence to China, although he frankly avows that nothing in its pathogenesis justifies its use. Success, however, has so frequently followed his prescription of China 6, that it is his chief reliance. Ferrum, which corresponds pathogenetically to involuntary urination, especially during the day, cured a case where China failed.—*Journal Belge d' Homœopathie*.

SPANISH HOMŒOPATHY.—Homœopathy in Spain, especially in the Catalonian city of Barcelona, is making great progress. There are 50 homœopathic physicians (the population of Barcelona is 500,000), two polyclinics, the Homœopathic Institute and the Academia Homœopatica. Each of the polyclinics issues scientific reports appearing in *The Revista Homœopatica Catalana* and *The Revista Homœopatica de l' Academia*. Of more important works there is a rich production. There are two homœopathic hospitals in Barcelona, "'del Desert de Sarria" and "'del Nino Dior." In 1904 the latter was greatly enlarged and is under the direction of a hospital chief with three assistant physicians, an oculist and an aurist. The out-door service is in charge of three other physicians with the co-operation of a dentist. The hospital is supported by private subscription and by the city and provincial authorities.

The polyclinic (Nino Dior) shows the following service (prescription free):

General Diseases	9,662
Eye Diseases	4,143
Ear, Nose, Throat Diseases	1,416
Dental Diseases	336
Vaccinations	345
	<hr/>
	15,902

The number treated at the polyclinic de l' Academia is smaller, the patients paying a small fee for drugs.

A third dispensary was opened February 2 in one of the suburbs of Barcelona.—*Allg. Hom. Zeitung*.

RANULA: THUJA.—February 24, 1900, a boy $3\frac{1}{2}$ years old, was brought to the office with the information that he had "glands in the mouth." The child was in general, well-developed but ill-nourished, of a "pasty" constitution. No striking symptoms save a lack of appetite. On opening the lips a tumor appeared, large as a pigeon's egg, apparently located on the under surface of the tongue and projecting over the teeth. Diagnosis: Ranula.

R. Thyra 30, 7 powders, one every third day.

March 22, the tumor markedly diminished; appetite better. Prescription repeated.

April 19, Ranula almost gone. Same prescription.

The cure was complete. During the medication a profuse diarrhea appeared now and then, responding to constitutional remedies (Silica, Arsenic).—Dr. Stiegele. *Allg. Hom. Zeitung*.

REMEDIES IN CEREBRO-SPINAL MENINGITIS.—*Cytisus laburnum*. Great prostration, sensation as if the heart were failing, sense of constriction in the throat, stiffness and pain in the nape, tearing pain from the nape into occiput, lustreless eyes. Afternoon and evening, on the left side. The convulsions and more marked cerebral symptoms have been observed in toxic cases.

Saponaria has similar symptoms: Weakness, cardiac weakness, great depression with drowsiness, dull indifference, violent eye pains, glaucomatic phenomena and ciliary neuralgias, supraorbital neuralgia, prolonged pulse; developed meningitis.

Tuberculinum.—A remedy of general significance not to be forgotten in epidemic meningitis. Bacillinum (Burnett) has been used with success, and the symptomatology of Koch's preparation (Nebel) shows the irritation and paralysis of the central nervous system, with its delirium, coma, collapse, fever, subnormal temperature, and involvement of vision. The remedy is to be thought of when weakly children in phthisical families are threatened or attacked.

Veratrum Viride.—Characterized by violent febrile oscillations, also subnormal temperature, congestions. It acts especially on the plethoric. Delirium, headache beginning in the occiput, vertigo, dim vision, dilated pupils.

acute hearing, rolling of the head, opisthotonos, cramps and convulsions, trembling, paralysis. Red stripe down the middle of the tongue. Very acute cases.

Ammonium Carbonicum.—No reaction in the beginning of the attack. Patient cold, cyanotic, very weak pulse. (Farrington.)

Belladonna.—Generally indicated in the beginning: congestion, redness, starting up as in fright, grinding of the teeth, prostration not complete.

Lachesis.—Progression of the disease, quick, weak pulse, cold feet, beat irregularly distributed, sensorium beclouded, sopor.

Sulphur.—May follow, especially with a repressed eruption (also in tubercular meningitis).

Apis.—May follow Belladonna, shrill cry, nervous restlessness, and signs of inflammatory exudate (Cf. Arsenic).

Bryonia.—Sharp head pains, as if it would split. Sensitive stomach, slight stupefaction, dark-red face, cracked lips, movements of the chin, violent thirst, lies perfectly still, stiff neck, also with suppressed eruptions.

Helleborus.—Condition still worse, lack of reaction, wrinkled brow, dilated pupils, strabismus, automatism, sooty nostrils, slow pulse.

Digitalis.—Slow pulse, scanty albuminous urine, throbbing frontal headache, delirium, sees balls of fire, amaurotic retinal congestion, dilated pupils, coma, prostration, coldness of the body with great sweat.

Other remedies: Glonoine, Hyoscyamus, Mercurius, Cuprum, Zincum, Gelsemium, Argentum rubricum, Opium, Stramonium, Cicuta, Arnica, Cro-talus, Chininum sulphuricum.—Dr. Schlegel. *Allg. Hom. Zeitung*.

ENURESIS REMEDIES.—*Sulphur* was commended by Jahr as the most reliable remedy. His results were so positive that he began all cases of enuresis with Sulphur unless some other drug was clearly indicated.

Cina is to be chosen when worm irritation causes the trouble: when the child is anemic, pallid, excitable, always boring into its nose, and sleeping restlessly.

Cauticum, when the enuresis occurs during the first sleep, with a certain weakness and relaxation of the sphincter vesicae so that the child urinates with every cough and sneeze.

Equisetum (generally the tincture) is adapted to cases with catarrh of the bladder, with frequent forced urination. The whole bladder region is extremely sensitive to pressure and touch.

Belladonna in the form of atropin is a favorite allopathic remedy for bed-wetting. Homœopathically it suits very excitable children, restless sleep, frequently frightened in sleep, rousing with a cry.

Ferrum phosphoricum best suited to anemic and weakly children who complain much of headache, catch cold in every draft, and suffer continually from enuresis.

Pulsatilla, especially in sensitive little girls, who cannot retain the urine during the day.

Calcarea carbonica, constitutional remedy, in bloated, rachitic children, with big belly and sweat on the occiput.—Dr. Haehl, *Hom. Monatsblätter*.

THREE KALIS.—*Kali muriaticum* (diphtheria, croup, catarrh. glandular inflammation, deafness), used for the sequelae of inflammation, exudation, infiltration, especially if of a fibrinous nature, located on serous membranes, or if the exudate be plastic in character. It is well adapted to the last stages of catarrhal affections. The most characteristic symptom is the white, thick, plastic exudate from mucosae; the white or gray base of the tongue. Its efficacy has been proved in catarrhs, croup, diphtheria, dysentery, pulmonary troubles. It may be alternated with Ferrum phosphoricum in cough, deafness, Eustachian catarrh, eruptions of little vesicles with yellowish contents; ulcerations with swollen edges and white or gray secretions; leucorrhea or gonorrhea with the characteristic discharge. The symptoms are worse by motion; and when the stomach is affected, worse by fats, pastries, etc.

Kali phosphoricum (neurasthenic conditions.)—Nervous conditions known as neurasthenia, cerebral prostration, exhaustion, are alleviated and cured by this substance. The results of loss of nerve energy, as prostration, weakness, loss of mental vigor, depression, insanity, mania, paralysis, tabes dorsalis, are obviated, especially if there be present a certain decomposition or disintegration of the blood. It is curative in septic hemorrhage, in scorbutic gangrene, stomatitis, putrid diarrhea, asthenic dysentery, typhus and typhoid fever, incontinence of urine, urticaria, epistaxis in children, vertigo, insomnia. The tongue has a mustard-like coating. Many symptoms are worse by noise, by sitting or lying, by mental or physical labor. The pains are worse in the open air; better by slow motion, by eating, by whatever relieves the mind of unusual exertion and tends to the re-establishment of nerve energy.

Kali sulphuricum (leucorrhea, diarrhea, skin affections, rheumatism, ulcers.)—The chief indication for this salt is the yellow, frothy coating of the tongue. All the excretions and secretions are thin, watery, frothy. It is used in bronchitis with watery, frothy expectoration; in dermal affections with yellowish, sticky exudations and desquamation; in pertussis, epithelioma, rheumatism, amenorrhea; scarlatina in the desquamation; deafness, psoriasis, intestinal or gastric catarrh with the keynote tongue. All symptoms are worse in a warm room and towards evening; better in the cold open air.—*La Propaganda Homœopatica, Mexico.*

IODINE.—According to Vaquez iodine arouses the defensive apparatus of the system by assembling the mononuclear leucocytes, whose phagocytic action is marked, at a given point. The antiseptic action of iodine is well known (furunculosis.) The tincture locally applied produces a profound vaso-dilatation and diapedesis. See and Lapique have made clear the action of potss. iod. in modifying the circulation. On ingestion there is temporary elevation of arterial pressure, followed by a depression equally temporary; it is therefore not a hypotensive drug. In reality it induces an active vaso-dilatation, and thus favors the heart. Iodine has furthermore an excitant action on white corpuscles.—*Le Progres Medical.*

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**A STUDY OF FERRUM: INCLUDING A CONSIDERATION OF IRON
AS A FOOD AND AS A THERAPEUTIC AGENT, TOGETHER
WITH AN EXAMINATION INTO ITS PRIMARY AND
SECONDARY PATHOGENETIC EFFECTS AND
THEIR RELATION TO DISEASE**

BY ELDRIDGE C. PRICE, M. D., BALTIMORE, M. D.

(Read before the Amer. Inst. of Hom., June, 1905.)

The object of therapeutics is the cure of the patient, and not the demonstration of a theory. Hypotheses, theories, and even authenticated laws concerning drug action, will not alter this object of therapeutics. We are, therefore, not practicing medicine to prove theories, but to heal the sick. To be able to heal the sick it is necessary to have correct knowledge of the possibilities of the agents used for that purpose; and the way in which such knowledge is attainable is, as Haller rightly insisted, by experiments with drugs upon the healthy.

For the past century efforts have been made from time to time to secure information of the character stated, but the result has not been altogether satisfactory; the question of vital perturbation due to drug influence upon experimenters in this field still being much confused.

Realizing this state of affairs, my endeavor for some years past has been to extract from this much confused and confusing subject of pathogenetic drug effects, some rational explanation of the attitude adopted by the organism of the drug ex-

perimenter when endeavoring to cope with the intruder, the drug.

If a drug in a given dose will cure a given condition under certain definite circumstances, the practical therapist should give that drug in the given dose under the known circumstances, regardless of the reason why it produces results. It is, however, not only a matter of satisfaction, but it is a necessity of therapeutic philosophy, to discover the correct, demonstrable reason for the result, if it be possible to do so. As a consequence of this fulfilling the demands of therapeutic philosophy, new facts may be discovered upon which new rules, new methods and, perhaps, even new laws may be formulated.

To say that we have attained the final solution of all problems, whether in the general arts or in the field of therapeutics, is presumption too great for the most self-complacent of egoists. Even the classification of the physiological data—pathogenetic, if you prefer—upon which homœopathy rests, has not been done acceptably to the world of science, or even to the satisfaction of all the practical believers in the law; some claiming that one kind of effects only should be used as a foundation, some that another kind furnish necessary data, and still another class of believers greedily call for any and all kinds of allegations as not only proper but necessary for the foundation of a satisfactory system of therapeutics. While this confusion of ideas continues, it is impossible to secure such general recognition for homœopathy in the world of thinkers as is accorded to the laws which have been demonstrated by rational crucial tests.

In this study of iron, therefore, it is my endeavor to offer an illustrative suggestion of a solution to the problem of drug influence, which may lead to an adjustment of the proper place of homœopathy in the great field of inductive philosophy.

At the very outset of our investigations we are met with the strong probability that iron bears a two-fold relationship to the human organism. First, it may be regarded as a food, and second, possibly as a dynamic agent classifiable with substances known as drugs. Let us first consider iron as a food.

Preliminary to a study of the functions of the human organism, we find it wise to inquire into the elements and principles of which the organism itself is constructed. Among these principles is the metal iron. In common with the other proximate principles, we further find that when iron exists in

too great quantity in the organism derangement will result, and, surprising as it may seem, we also find that when it is not supplied in sufficient quantity practically the same kind of derangement will result. Nothnagel and Rossbach note the following on this point: "The statements so generally made, that iron continued for a long time, or administered to patients who are already of a plethoric disposition, causes flushing, palpitation, a tendency to congestions and even hemorrhages, seem to be the result of *a priori* reasonings, for nowhere could we find any proof for such a statement, and, furthermore, observations made upon those living in the neighborhood of iron springs, who use chalybeate waters as a daily drink, not only failed to show any plethoric individuals, but on the contrary revealed a wonderful tendency to anaemic conditions."

The fact seems to be that when iron is given to persons whose blood is deficient in this metal, the general health of the individuals will be improved up to the point where the blood has absorbed the normal amount of iron. If the agent is continued beyond this point, there will be a retrograde movement in the general health, due to the gradual return of the blood to the anaemic condition which existed before ferrum was given. This seems to be a fact still awaiting explanation.

According to Stockman, the food of the average individual contains, in twenty-four hours, one-eighth to one-sixth of a grain of iron, and through all channels one-eleventh of a grain is eliminated in the same time. This is apparently the normal relation between the intake and the output of iron in the healthy human organism; and a pertinent query suggests itself in consequence, as to what becomes of the surplus iron that is not discharged from the organism. It is known, however, that more or less of this metal may be deposited in the spleen and liver, from whence it may be drawn to supply the needs of the system when insufficient is taken in food, but what becomes of the excess over and above the amount thus stored and finally used, there seems to be nothing definite known.

However, whatever may become of this ferruginous surplus, the fact is that when iron is introduced into the organism it is utilized in the blood-making process, entering into the formation of hematin, of which it constitutes a large proportion. It is hematin, of course, which enables the red corpuscles to carry oxygen; without iron there would be no hematin, and without hematin there could be no oxidation of tissues, and

life could not be sustained. Consequently, when iron is not present in sufficient quantity in the blood, the blood deteriorates in quality and is no longer the vitalizing recuperative agent it must be to maintain health. Enough iron must, therefore, be introduced into the organism to furnish the needs of the blood. On the other hand, if there is too much iron in the blood, the function of the red corpuscles is disturbed in some manner, and health suffers.

It is a fact that it is necessary to present the proximate principles in a finely subdivided form for utilization by the cells of the tissues in which they are to do their work, and this explains why it is that large doses of iron frequently fail to produce the desired results when administered as a food, when smaller quantities are effective.

As already stated, iron may possibly have an influence upon the tissues, or the vitality of the organism, distinct from its food relation. If this double influence exist, however, we are driven to decide whether the pathogenetic action of ferrum is responsible for the febrile tendency and the congestions which this substance may produce (Nothnagel and Rossbach to the contrary, notwithstanding), or whether the food property of the agent causes such conditions; or, on the other hand, whether the pathogenetic influence is responsible for the anaemia and debility which is due to the protracted use of iron, or whether it is the food property that is responsible.

The unqualified fact seems to be that in states of debility, when the blood is poor in hematin, material doses of iron will increase the number and vitality of the red blood corpuscles, thereby relieving the weak condition of the patient; while in cases manifesting signs of plethora, congestions, haemorrhagic tendencies, etc., iron in infinitesimal doses (i. e., the 3rd to the 6th decimal), will cause a return of the organism to its normal state.

The principle upon which iron acts as a food is that of antipathy; and in the field of therapeutics, we have strong suspicions that the law of similars explains its apparent curative results. The biochemical conduct of all the proximate principles needs to be more fully understood, however, before we can feel fully qualified to adopt safe ultimate conclusions, as to the therapeutic principle governing their action. We know something of what iron will do as a food, but because of the very few experiments with iron for pathogenetic purposes, it is difficult to form an adequate idea of its possibilities in this field.

Investigation reduces our sources of even approximately reliable iron experimentation to the few records embodied in the *Cyclopedia of Drug Pathogenesis*. We find, in this monument of industry, but nine records in all. Five of these are of experiments with the acetate of iron, two are of experiments with the 1st trituration of the metal, one with the 2nd decimal trituration of the phosphate, and one with the iodide from inhalation while preparing the 1st decimal trituration, which experiment was further continued in a proving of the crude iodide and the 1st decimal trituration. It is these nine experiments from which the following study of iron as a drug has been prepared.

It may be objected that we can adopt very few conclusions from these records, as to the pathogenetic effects of iron, that none of them is preceded by a health record, and that they include the effects of four different preparations and not of the metal only.

This is quite true, but it is the best we can do with the material at our command. Through the effects of these four preparations of the drug, however, it is quite possible to trace what may reasonably be considered the influence of the metal iron; and these effects are, therefore, submitted as strongly suggestive of the pathogenetic action of *ferrum metallicum*. Even in the case of the iodide, although quite irritating locally in its earlier effects, yet the bulk of its symptoms bear a strong family resemblance to the details reported by the other experimenters with different preparations.

Before considering the double effects of a drug, it is necessary to recognize the fact that drugs do not act, but that it is the organism into which they are introduced that is the active factor in the problem; that the first manifestation of excitement in the organism due to the presence of the drug may be regarded as a primary effect of the drug, and that all other manifestations which are consistent with these first effects, and have the same pathological tendency, may be considered primary effects also. On the other hand, all effects inconsistent in character with the first manifestations of the organism may be considered secondary effects.

It must not be forgotten, that the greater the amount of drug given to the experimenter, short of toxic effects, the greater will be both primary and secondary manifestations, and that it is quite possible for a drug to cause an evidence of an effort

of the organism to do something in relation to the intruder without exhausting its resisting powers to the point of perceptible need of rest, reactionary effect. Consequently, when a drug is given in very small dose no secondary effect may be perceptible. In the case of our subject, I am inclined to believe this is true of some of the experiments in which very small doses were taken, and this, of course, explains why there are apparently some primary effects without any discoverable reactionary or secondary effects following.

This question of primary and secondary drug effects is important, and can not be set aside lightly, but it demands the best thought of the best minds. In this study of iron there are details of action about the classification of which we may be in doubt. Such details must, therefore, be held for mature consideration in the light of new facts, some of which may not yet have been discovered. But of some fundamental data there is, apparently, no reasonable doubt; and we are, therefore, justified in classifying and utilizing such data. It is in this spirit of cautious inquiry that the following results are submitted.

When the temptation to severe criticism becomes strong, it must be remembered that this study is merely suggestive, tentative. We need more carefully conducted experiments before a correctly arranged symptomatology of double effects of iron can be constructed.

In the following study of detailed effects of our subject, we have been guided by what may be called the gross primary effects of the drug, based as they are upon the general excitement of function which is known to follow the administration of iron in orthodox "tonic" doses.

GENERALITIES.

As just stated, iron may be regarded as a promoter of functional activity when given in the usual physiological doses, and we are, therefore, not surprised to find that the general effects noted in the *Cyclopaedia of Drug Pathogenesis* bear out this observation, even when the agent is given in comparatively small amounts.

We find five of the experimenters noting the early effect of iron as increasing the strength both mentally and physically in some instances; while later there was physical weakness, and also mental debility in some cases.

The "desire to destroy things," recorded by one experimenter, was probably due to excess of blood in the brain, and was later followed by both mental and bodily depression.

HEAD.

This increased amount of blood in the brain was productive of a sense of compression in the frontal region and pressure in both temples, together with confusion of the head. These suggestions of cerebral congestion were further corroborated by an aggravation of the sensation from being in a hot room, from stooping, holding the head down, shaking the head, reading, writing, thinking, walking, and in fact from doing anything which added to the vascularity of the brain; and diminished by lying down, by being in the cold air, and in a draught, i. e., under any circumstances calculated to reduce the vascularity of the brain.

One prover notes "painful smarting in the r. eyelid," and "sharp ache at outer edge of l. orbit, as if in bone," and also "similar but slight pain in r. side." In common with all other experimenters with iron, this prover kept no preliminary health record, and as he was noted, during his lifetime, for a remarkably lively imagination, this record should be taken "*cum grano salis*." This same experimenter also records "sticking in r. ear," but as no other prover notes any deviation from normal ear conditions, and for the additional reasons mentioned, I hesitate to credit this to iron. It would be interesting, however, to know whether or not such symptoms—granting their reliability—were due to the primary congestive influence of iron, or to its secondary debility; whether the pain was from pressure or was the cry of the nerves for food.

Consistent with the foregoing primary head manifestations, there is noted "face redder than usual," "great redness of complexion and fulness of face," "brilliancy of complexion," and "heat and dryness of face." Following these details there are no secondary manifestations recorded.

RESPIRATORY TRACT.

Considering now, the mucous membrane of the respiratory tract, we find recorded, "scraping in nose," "nose dry, stopped up as in coryza," and "violent coryza," "painful smarting of r.

posterior nasal passage," and "after rising, severe epistaxis, which relieves the head." These all point to the characteristic primary congestion caused by iron.

Following the respiratory tract in its downward course, we find reported, "dryness of the fauces," "aching in throat," "irritation in throat," "throat heated and dry;" all of which are consistent with the primary details already noted. One experimenter records the hawking and expectoration of mucus, which may possibly be regarded as due to the effect following the primary irritation; or it may have been due to the local irritation caused by the fumes of the 1st decimal trituration of iodide of iron which had been inhaled during preparation.

Down still further in the tract we find "hoarseness with feeling of roughness in larynx," "slight stitches through the lungs," "felt need to breathe deeply," "on waking in morning painful irritating sensation in larynx, causing him to cough and hawk, increased by pressing on it; towards noon going off and succeeded by similar sensation behind upper third of sternum; in hawking and coughing he expectorates frothy viscid mucus, mixed with black blood—this often occurs till 4 p. m.; auscultation reveals nothing but mucus rales behind manubrium sterni and sharper impulse of heart." There is also dyspnoea, with inclination to breathe deeply, which act causes a sensation of tightness and pressure under sternum.

All the foregoing respiratory manifestations are, without doubt, due to the congestive condition which ferrum seems to cause in the organism.

CIRCULATION.

The circulatory apparatus is also involved, and there are repeated evidences of excitement of heart action. The pulse is tense, stronger and fuller than normal. Sometimes it is more rapid, and sometimes not so rapid, but the strength is increased. In one particularly nervous temperament "palpitation" is reported.

DIGESTIVE APPARATUS.

The primary action of iron on the digestive tract is consistent with its "tonic" effect upon the rest of the organism. The appetite is increased—in some instances being "ravenous"—and increased sense of warmth is excited in the stomach, to-

gether with a feeling of pressure; touch sometimes causing pain when the latter sensation was present.

Following this increase of appetite, there was a diminution of desire for food, and in some instances not only repugnance, but positive nausea developed.

The irritation extends down in the intestinal canal, and we find general abdominal pain, with accumulation of flatus, and sensation of warmth. Touch of the abdomen sometimes caused pain, but more frequently the experimenter reported no pain on touching the abdomen. There was, apparently, no inclination for evacuation of the tract, but later rumbling attested the presence of gas, and following were copious discharges. There was also present tenesmus recti.

Here it is not difficult to recognize the early constipative effect of iron, and its later secondary action in the diarrhoeic discharges. There is, however, nothing characteristic to be gleaned from the limited number of inexperienced experiments, as to the stools.

(There are some recorded evidences of more decided gastric disturbances, but as these provers took quite large material doses of the drug it is quite probable these details were due to the local action of the iron. They are, of course, not admissible among the physiological effects of our agent.)

URINARY TRACT.

The urinary tract also shows its sensitiveness to iron. There is tickling in the urethra, the navicular fossa being especially affected; tenesmus vesicae being prominent, with frequent urination. Owing to this acute irritation there is over stimulation of the mucous follicles of the tract, and a deposit of mucous occurs in the urine. This last may possibly be due to relaxation, but I feel inclined to regard it as the result of increased stimulation of the follicles.

This irritation of the lower part of the tract extends up into the kidneys, apparently; one experimenter reporting "pain in sacrum and kidneys."

SEXUAL ORGANS.

One experimenter only mentions involvement of the sexual organs—erectations—and this was an accompaniment of restless, dreamful sleep.

SLEEP.

Dreamful, restless sleep, which was experienced by two experimenters, was doubtless caused by too much blood in the brain, and should, therefore, be regarded as a primary effect. On the other hand three experimenters reported an unnatural inclination to sleep; which may be regarded as resulting from too little blood in the brain (possibly), and therefore, a secondary condition.

MUSCULAR SYSTEM.

The muscular pains reported as resulting from iron, may possibly be due to its primary effect. The drug acting as a promoter of functional activity, may cause the organism to go a step further in its attempt to "do something" in relation to the intruder, and thus manifest an excess of sensibility. We believe this to be the case when pain is an accompaniment of other conditions. On the other hand, as will be seen, there are pains existing *pari passu* with exhaustion and general relaxation. In such instances the pains are doubtless due to an exhaustion calling for building up the affected part. Here we would regard iron as benefiting because of its food value; restoring the needed iron to the tissues requiring it.

THERAPEUTIC APPLICATION.

We now come to the real battle field of this question of primary and secondary drug effects; the field in which drug effects are applied to the cure of the sick.

I have said we are sure of the food relationship of iron to the organism, but that we are not so sure of a therapeutic relationship. While this may be considered an extreme expression, yet even when all the details credited to iron as a pathogenetic agent are considered, we are still unable to say that these changes in the normal status of the experimenters were not because of modifications in metabolism due to the addition of *ions* of the food iron to the red corpuscles. Who can solve this problem?

Let us, however, give the benefit of the doubt to the alleged therapeutic virtue of ferrum, and, assuming iron to be a drug, discuss its uses from this point of view.

To be in position to apply the little knowledge we have of drug effects, it is necessary that we decide whether we are to accept the primary or the secondary physiological effects of

drugs, as indications for their therapeutic use. Without going into a discussion of the subject, it is sufficient to say that I accept the primary effects as indicative of the active disturbance caused by introducing drugs into the approximately healthy human organism, and the secondary effects as indications of the inactive condition of the organism of the experimenter during pathogenetic tests; and therefore, I regard the primary effects as of more importance in therapeutics than secondary effects.

Adopting this view as a working basis, it is in sequential order to consider the relationship ferrum bears to the conditions for which it is most frequently prescribed.

One of the most frequent conditions in which iron is prescribed by all schools of medicine, is, probably, anaemia. Herein the blood lacks iron, and when we give it we are supplying the ingredient it needs. Ferrum is here a food, acting as any other food, and consequently, is antipathic to such conditions. There is absolutely no foundation for a belief in a therapeutic relationship under such circumstances. Certainly the pathogenetic records we have had under discussion furnish nothing to justify such a belief.

The same principle applies when iron is prescribed in all conditions of debility due to lack of nutriment or lowered vitality of the organism. In cases, however, of febrile excitement, in which there is local congestion, especially of the head, middle ear, etc., iron may be expected to give relief in accordance with the law of similars. If the congestion proceeds to the point of capillary rupture with hemorrhage, so much the better for the homœopathic indication for ferrum. And here we may entertain our strongest suspicion that iron *is* a drug.

The vicarious discharge of blood from distant parts, when amenorrhœa exists, may be due to various causes. If it be from disturbed vascular equilibrium due to congestion of the bleeding part, then the law of similars may explain the restorative action of iron; but if the condition be from disturbed vascular equilibrium due to anaemia, then restoration occurs on the principle of assimilation of all foods.

The use of ferrum in fevers has some foundation in the little pathogenetic information we have, and even in the dyspnœa, —suggestive of asthma—due to pulmonary congestion the drug may be regarded as homœopathic.

In diarrhœa due to anaemia, the condition is relieved by re-

storing the normal constituency of the blood, and the cure results in accordance with the antipathic principle.

Dyspeptic conditions, in which the patient has a voracious appetite, and flatulence exists to an annoying degree, have their *similimum* in iron. But in such conditions with *anorexia*, nausea, diarrhoea, flatulence, sensitive abdomen, due to anaemia, then it is the law of dissimilars we lay under contribution when we cure with this agent.

Ferrum has been frequently prescribed in Bright's disease of the kidneys. We find in the pathogenesis of the drug suggestions of irritation of this organ; but nothing more than suggestions. When, therefore, iron is successfully used in Bright's disease we may suspect its curative action to be due to homœopathy; but we must remember our conclusion is largely inferential.

Suggestions of nerve pains have been found in the pathogenesis of iron, and also of muscle pains. Consequently, in inflammatory conditions of nerve tracts iron may be considered as probably homœopathic; but if the pain is a cry of the nerve for nourishment, the trouble is from anaemia, and if iron acts curatively its effects are due to the principle of dissimilars. In muscle pains, either of rheumatic origin or of simple myalgia, iron may be regarded as standing in a homœopathic relation to the condition.

In conclusion, it is hardly necessary to remind you that the range of use for this greatest metal of civilization, in the practice of medicine, lies in the two general conditions of the human organism upon which Brown and Broussais founded their diametrically opposite systems of medicine. In anaemic and depleted states of the system, iron acts as a food, in accordance with the law of dissimilars, and in febrile and congestive conditions it acts probably as a drug, and in accordance with the law of similars.

This study should furnish us with much food for thought. It should show us that our physiological drug material is in sad need of systemisation. It should show us that much of our boasted knowledge of drug pathogenesis is conjecture and assumption; that of the proximate principles in particular we may well stop and ask ourselves the question: Are the reputed effects of these agents in disease due to drug influence, to changes in metabolism due to the food relationship, or to psychological suggestion; or are they due to a combination of all these influences?

CEREBRO-SPINAL MENINGITIS.

BY R. S. MARSHALL, M. D., PITTSBURG, PA.

(Read before the Pathological Society of Pittsburg, May 8th, 1905.)

Cerebro-spinal meningitis has been recognized as a distinctly epidemic disease only since the beginning of the last century.

A small outbreak occurring in Geneva in 1805, was described by Vieusseux, and in 1806 and during successive years several epidemics attracted considerable attention in America.

According to Hirsch, the earliest outbreaks of the disease may be divided into three groups, the first from 1805 to 1830, when the main incidence of the disease was in the United States; the second from 1837 to 1850, when the disease was severely felt in France and somewhat in America; the third from 1854 to 1874, when neither Europe nor America was free from its attacks.

Since 1874 it has broken out in many parts of America, and during all of the intervening time might be said to have been epidemic in America, sporadic cases occurring throughout the country.

The general average mortality in this dread disease is placed at 37 per cent. and ranges from 20 to 75 per cent. in different epidemics. Of the recent epidemic I may say that the mortality has been very high and very little influenced by modern methods of treatment.

According to the best authorities, the disease does not seem to be directly contagious or transmissible by contact or by the excretions.

A commendable effort is being made by the New York Health Board for the investigation of the disease, especially as to its communicability and as to the biology of the different pathogenic bacilli known to bear a causative relation.

Under the term "Meningitis" is understood an inflammation of the Pia arachnoid, the intimately investing membrane of the brain and spinal cord. This membrane contains the greater part of the blood vessels and lymphatics which extend into the brain.

The lymphatics are situated in the adventitial sheath of the veins and arteries, and in tuberculos meningitis receive the brunt of the infection of the Koch bacilli.

Infectious agents gain access to the meninges by means of the blood current, by the lymphatics or by the extension of infectious processes from adjacent mucous surfaces.

Meningitis may be produced by a number of bacteria, but principally the *Diplococcus* of Weichselbaum, named by him the *Diplococcus Intracellularis Meningitidis*; also by the pneumococcus, the *Streptococcus* and the Koch Bacillus.

The type produced by the *Diplococcus Intracellularis Meningitidis* is that known as the epidemic variety and contrary to the general belief has a lesser mortality than that induced by other forms, especially the pneumococcus which probably causes the greatest mortality.

With rare exceptions all cases of primary meningitis even when sporadic, are due to the *Diplococcus Intracellularis* of Weichselbaum. This organism has been found in the nose, associated with acute coryza and rhinitis, by Sherer and Saenger, and there is reason to believe that the infection to the meninges occurs frequently by means of the lymphatics connecting the nose with the brain. Careful reading of an excellent symposium on this subject in a recent number of the *Albany Medical News* will repay any one interested.

An investigation of 61 autopsies at the Massachusetts General and Boston City Hospitals since 1897, shows 21 of the epidemic or *Diplococcus Intracellularis* form; 18 due to the *Pneumococcus*, and 18 showing only the *Streptococcus* infection. Of the latter in but one was the infection primary in the meninges, generally occurring from a mastoiditis, otitis media, fracture, endocarditis, acute broncho-pneumonia or cystitis. Of the remaining four of the 61 cases—two were due to the *Staphylococcus aureus* and two not determined.

They found none due to the typhoid bacillus but, as I have recently seen some cases of mastoiditis due to this organism, there is great probability of its also bearing a causal relation.

The disease claims the larger number of its victims from the homes of the poor, but is not infrequently found where good sanitary conditions prevail. Plenty of fresh air is undoubtedly inimical to the propagation of meningitis.

Of the symptoms, it has been said that "there are cases so mild that they may almost escape detection," and, on the other extreme, those of the so-called "lightning" form, which give no opportunity for treatment or possibility of cure; or if recovery should occur, relegate the poor victim to a "mattress

grave," some robbed of their sight or hearing, or perhaps permanent damage to vital organs, which has led the lay world to fear the infection whether epidemic or sporadic.

In all forms opisthotonus is rarely absent. The headache is always severe, inducing persistent groans and an occasional shriek, even when the sensorium is thoroughly blunted.

General Hyperaesthesia is the rule, also Photophobia. Pressure on the nerve trunk is painful and may give rise to contraction or tremor. The face of the patient and the characteristic position in bed, with eyes drawn, limbs wasting and contracted is a picture not simulated by other diseases. The reflexes follow no rule.

Biot's or Cheyne-Stokes breathing may be present—also frequently bronchial catarrh. The pulse and temperature offer nothing characteristic. Hyperpyrexia characterizes some cases, the foudroyant type always ending fatally in a few hours. The abdomen is generally retracted, said by Traube to be due to irritation of the pneumogastric. The skin supplies a number of lesions in Herpes, Erythema, Roseola and Hemorrhage.

Of Herpes, Ziemssen says: "In no other disease have I observed facila herpes which spreads so widely." It appears early and in repeated crops. Attention has been called by some one to the similarity in this respect to the febrile herpes of pneumonia. This is more striking as the Pneumococcus is so often found as the causative factor of meningitis and moreover the pneumococcus and the Diplococcus Intracellularis Meningitidis are almost indistinguishable in appearance and behavior. Cutaneous hemorrhage which has given to the disease its name is not always present. The cerebral malcule has been early and persistent in most cases. Convulsions are rare in adults, sometimes initiating the attack in children. Vomiting often occurs early, but is more common in the tubercular form. The blood in all varieties shows marked polynuclear leucocytic increase—(from 9000 to 24000). The Kernig phenomena is almost always present.

The eye symptoms show great variety in different epidemics. The conjunctiva, the cornea, the choroid, the optic nerve or the retina may be involved. Carl Fraenkel and Axenfeld have found the Diplococcus Intracellularis in the purulent secretion from the conjunctiva. Inequality of the pupils is a sign of importance in the diagnosis.

PROPHYLAXIS—

As has been said before this dread malady is not now considered highly contagious, largely because the infectious agent is so securely enclosed within the calvarium and spinal column, but in the light of recent research I think it incumbent on the practitioner to attend carefully to the nasal and ocular excretions, to avoid the spreading from the cases in hand. This seems to me to be practicable, but I have seen no mention of its having been done. As a preventive, in New York, a few of the rhinologists have recommended the spraying of the nose and throat, twice daily, with a saturated solution of Boracic Acid.

TREATMENT—

Dr. Morris Manges, in discussing a recent excellent paper by Councilman, says that considering the fact that Cerebro-Spinal-Meningitis is a disease involving not only the meninges but the underlying cortex as well, we can see how hopeless any form of treatment must prove, or again if one could see that picture of a thick, tenacious membrane covering the base of the brain and the spinal cord, in many instances he could premise the hopelessness of any therapeutic agent. Even after one has apparently rescued a case, the danger of sudden death is to be apprehended for some weeks. The hot baths as recommended by Aufrecht and further elaborated by Blavot are of unquestionable value. There is little doubt of their salutary effect in decreasing the headache and stiffness and improving the circulation. When the condition is grave Blavot prolongs the bath to 25 minutes and recommends its use at 104° to 106° F. every three hours, day and night.

Lumbar puncture, with drainage is of doubtful value, unless to relieve temporarily severe pressure symptoms, but as a method of definite diagnosis it is to be commended, also we may later find it to be of great service regarding exact specific treatment to a given infection. Dr. Loomis, at Bellevue, has shown interesting possibilities in this line by the intra-spinal injection of Argyrol. After death the silver salt was found to be distributed not only over the spinal cord, but also over the cortex and base of brain. The spinal canal shows great tolerance of these injections.

The use of Diphtheria Antitoxin has been tried recently by Wolff, of Hartford, and Wartzfelder, of New York, with questionable results. Stockton, of Buffalo, sums up the old-

school treatment thus: "Nevertheless from a review of the subject, I would conclude that the most useful procedure is the bringing about of the best hygienic conditions for the patient—absolute quiet in a well ventilated, darkened room—giving attention to the bodily functions—The trial of hot baths after the method of Aufrecht—the practice of intraspinal puncture, with drainage where necessary to relieve severe pressure symptoms—the use of anti-pyrin for the pyrexia and headache and hyperaesthesia—the use of mercury for its laxative effect or where needed to assist in stimulating the organs of elimination."

As Homœopathic practitioners, I believe even in this grave malady we have a distinct advantage. We must recognize the fact of the positive incurability of nearly all cases of the foudroyant type, but where there is time for action we must not neglect the careful use of our excellent armaamentarium, combined with the foregoing adjuvants.

In the early stages of the acute variety I would say that *Gelsemium*, *Belladonna* and *Bryonia* offer the best symptomatic picture and with these some of our school have had good results. Later *Cicuta* and the metals—*Cuprum* and *Zinc* have produced excellent results and a study of their symptomatology will show a close similitude.

In the tubercular form I have had some gratifying action from Iodoform in the second decimal trituration.

CALCAREA CARB. IN SUMMER DIARRHOEA OF CHILDREN.—The remark in one of our recent journals that "nine out of ten cases of children's diarrhoea can be cured by *Calcarea Carbonica*," is probably just a trifle wild; and yet in the intestinal difficulties of the hot season that is now upon us, this remedy is really a much better routine remedy for the early stages than many of those remedies that are given first: or, until the symptoms can be properly looked up in the repertories. A few doses of *Calcarea* at the beginning of an enteritis with frequent, very offensive, green or yellow stools, containing undigested milk curds, in a bottle fed baby, is really not such a bad prescription. Very often a much better beginning than *Arsenicum* and *China* in alternation, for example, as we see so often prescribed. The whole truth of the matter is that in the summer diarrhoeal diseases of infants, our first duty is to correct the cause, which is generally in the food, then to be careful, very careful, in the first prescriptions for the case. Get your remedy very clearly indicated; for, by these methods, we may generally avoid the troublesome, protracted, hopelessly ill cases. This year, in particular, the cases have often shown the common *Calcarea* indications, and this remedy has been indicated oftener than any other, in our experience so far. Still, differentiation is the thing that pays.

EPITHELIAL TUMORS.

BY W. NELSON HAMMOND, M. D., PHILADELPHIA, PA.

These tumors may be divided clinically into three classes: benign, malignant and doubtful. Of these the doubtful class is of no little importance, as the line where malignancy begins is often hard to determine.

Clinically, the benign growths may be divided into: the ordinary wart, the papilloma or mixed wart, and the brownish patch known as *verruca senilis*. It is not as benign tumors that these are of surgical interest, but because of their tendency to undergo malignant changes. Probably there are no tumors less justifiably allowed to get beyond an operative cure than these, on account of the long period of latency and the tardy involvement of the lymphatics. These benign epitheliomata occur at any age, but it is the rule that the malignant changes take place in advanced life. They may be found in almost any part of the body, but those taking on malignancy are usually situated about the forehead, cheek, nose, lower lip, and rarely the upper lip. This is no doubt due to the exposure to irritation at these sites, for here trauma plays its role, either starting these changes or firing the already malignant, though latent, tumor. I have in mind as apparently benign warts: one situated on the neck in such a position that it was irritated by the rubbing of the collar; another on the upper part of forehead that was often struck with the comb, and still another on the upper lip, the patient constantly wiping it with the handkerchief. All of these subsequently became malignant.

In the first changes from the benign, a superficial ulceration takes place around the edges with the formation of a scab; then follows deeper ulceration with more or less induration, the tumor now taking on one of the clinical varieties of *carcinomata* of the skin. It should be remembered that at times these tumors have their beginning in lesions that seem always to have been malignant. I refer to the cracks and fissures about the lips and the subcutaneous nodules, which, when they appear, follow a persistent course. Cases are recorded, and one such presented in this paper where the tumor had its origin in a patch of psoriasis.

Also old scars at times take on malignant changes. I have seen three such growths within the past year; one at the end of

a stump after amputation; another in a scar on the sole of the foot, and a third in the cicatrix of an amputated breast.

The clinical varieties of malignant epitheliomata may be conveniently divided into: the discoid, a superficial ulceration which frequently assumes a rodent type; the deeper fungous ulcer, and the subcutaneous nodule, which is scirrhus at first, and later ulcerates. As to the position where these are found: the discoid and rodent ulcer are most common about the face, neck and trunk; while the fungous ulcer is most frequently met with about the extremities and lower lip.

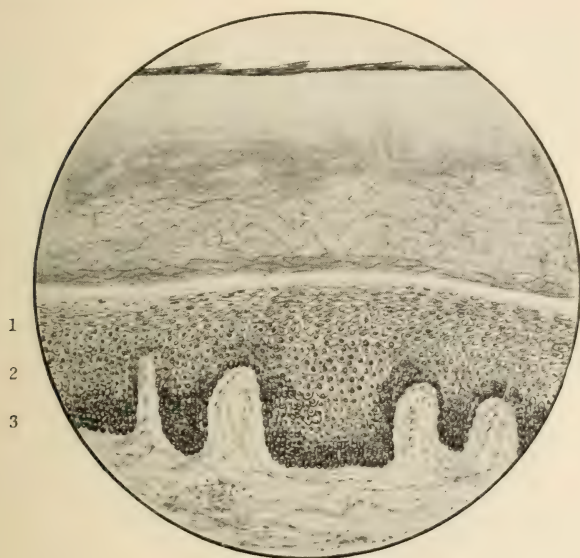


FIG. 1. NORMAL SKIN.

1. Superficial layer of prickle cells.
2. Middle layer of cuboidal cells.
3. Deep layer of basal cells.

In studying these tumors histologically we can follow the plan of Krompecher in his work "*Der Basalzellenkrebs*," and divide the skin into three layers of cells (see Fig. 1); the lowest is composed of basal cells and corresponds to the rete and outer lining of the hair follicles. These cells are columnar in shape and placed perpendicularly on the corium. The superficial layer is made up of cells more rounded or polyhedral, containing numerous epithelial fibrils, and are termed prickle or spinal cells; while those of the middle layer are more or less cuboid in shape and are known as cuboidal. These cells are

concerned in the benign and malignant skin growths, and bear a relationship to the malignancy, prognosis and treatment.

Some tumors are found made up entirely of the basal cells; in others the prickle cells predominate; more rarely the cuboidal. These cells take various forms in the process of infiltration and show characteristic degenerative changes.

Of the basal cell tumors the most common form is the solid, the cells arranged in compact nests or alveoli (see Fig. 2). Again there may be found an adenoid type, the cells grouped in figures resembling glandular tissue, as shown in



FIG. 2. SOLID FORM OF BASAL CELLS.

Fig. 3. Or there may be a cystic formation, the little cysts about the size of a lentil are lined with layers of basal cells, and contain in the centre fat or hyaline material. Sometimes the combined forms are found in one tumor, especially the solid and cystic types.

The degeneration in these tumors is quite uniform, usually hyaline, forming numerous bodies or nests throughout the tumor. The carcinomata formed by the basal cells are the least malignant. The majority of skin tumors called rodent ulcer belong to this class, and lymphatic involvement, if it takes place at all, is very late.

The prickle cell tumor is distinguished by the formation of nests of cells arranged concentrically, forming pearly whorls. Just as hyaline degeneration is peculiar to the basal cell, so this pearly body formation is characteristic of the prickle. This is the most malignant skin carcinoma, metastasis taking place early.

The cuboidal cell tumor, composed of cells like those of the middle layer, is a very rare tumor. It occupies the middle position as regards malignancy.

In the histologic classification I will follow Krompecher



FIG. 3. PRICKLE CELLS. SHOWING PEARLY BODY FORMATION.

closely, placing the benign wart as a fibro-epithelioma of either basal or prickle cell formation:

Fibro-epithelioma } Spinocellulare.
 } Basocellulare.

The malignant tumor as a carcinoma of either basal, prickle or cuboidal cells. The basal cell tumor to be again divided according to the form of infiltration:

If the solid type—

(a) Carcinoma basocellulare solidum.

If the adenoid—

(b) Carcinoma basocellulare adenoides.

If cystic—

(c) Carcinoma basocellulare cysticum.

When the forms are combined—

(d) Carcinoma basocellulare solidum et cysticum.

The tumor, composed of prickle or spinal cells, distinguished as—

(e) Carcinoma spinocellulare.



FIG. 4. RODENT ULCER (BEFORE TREATMENT).

And that of the cuboidal cells as—

(f) Carcinoma cubocellulare.

The following illustrative cases were selected from the service of Dr. William B. Van Lennep in the Hahnemann Hospital:

Case I. (Fig. 4) Sarah G., age 72 years, history of psori-

asis: About two years ago the patient scratched one of the patches of psoriasis making it bleed; following this an ulcer developed that persistently enlarged. No palpable metastasis. The lesion presented clinically a rodent ulcer. A section (see Fig. 2) showed it to be a basal cell tumor of the solid type. On account of the large area it was thought best to treat it with the X-ray, which rapidly healed it. (See Fig. 5.)



FIG. 5. SHOWING RESULT OF TREATMENT BY X-RAY.

Case 2. Mr. B., age 62 years, history of wart over the mastoid process of temporal bone; he frequently struck it while combing his hair; about nine months ago it began to ulcerate and progressed rapidly. A section showed it to be a prickle or spinal cell tumor. The patient was referred for X-ray treatment, and, though the ulcer was persistently treated, it remained apparently unaffected.

Case 3. Mr. S., age 52 years. Six months ago he noticed a small indurated area under the prepuce of the glans penis, very painful and rapidly growing; although no venereal history was obtained, it was regarded as of that origin by his physician and, only after treatment had failed, was he referred to the hospital, where a tentative diagnosis of carcinoma was made, which was confirmed histologically. A section from this tumor showed it to be of the prickle cell variety containing many whorls. Amputation was advised, and during the interim X-ray treatment was applied; though carried to the maximum therapeutic dosage no favorable influence on the tumor was noted.

The clinical value of the histologic study of these tumors is that the basal cell tumor is the least, and the prickle the most malignant form of skin carcinoma, and that a tumor may be clinically a rodent ulcer, and yet be composed of either basal or prickle cells.

In considering the proper treatment to be followed with these tumors, when we remember the exciting effects of trauma, and that caustics are decided irritants, it is obvious that this line of treatment should be condemned.

The treatment by arsenic solutions and pastes removes some superficial growths; electrolysis and X-ray have also some cures to their credit. Of these remedies the X-ray probably has the broadest field. Given a large rodent ulcer, of the basal cell type, I believe it is justifiable to use the X-ray. In the prickle cell tumor it seems not to be of any value, and I am inclined to think that in some instances, it is a positive irritant. In a case recently observed, the patient, 65 years of age, had a history of a benign wart situated on the upper lip for ten years. About three months ago the wart began to ulcerate, and at the request of the family, X-ray treatment was given. In this case the tumor seemed to be excited by the rays and excision was advised and carried out.

In certain inoperable skin carcinomata, and in cases where the metastasis is such that a radical operation cannot be performed, the X-ray should be tried.

The lymphatic metastasis bears little relationship to the tumor in size, nor does it always follow that the nearest glands only are affected, as at times glands some distance from the lesion have been found involved. For this reason, after the removal of a prickle cell tumor where metastasis has developed, it would at least be a safe plan to "ray" for a given time.

Whilst cures are reported from these various remedies, yet there are many failures, and it is the purpose of this paper to encourage a treatment which meets with better success. When we consider that most of these tumors have a long period of latency; that all of them at some time are operable; that good cosmetic results are often obtained from excision even in large growths; and that if operated early enough, the cure is 100 per cent., we are justified in believing excision to be the best measure to follow. As the general practitioner most frequently sees these tumors in their early life, it behooves him to be on the safe side and advise their removal while they are apparently benign.

THE PREVENTION OF TUBERCULOSIS.

BY A. B. SCHNEIDER, M. D., CLEVELAND, OHIO.

(Read before the American Institute of Homœopathy.)

A disease which is responsible for ten per cent. of all deaths; a disease which takes off the majority of its victims during the productive period of life, namely, between the ages of 15 and 55, making the deaths from tuberculosis during these years aggregate thirty per cent.; a disease which entails not only long and loathsome illness, but protracted disability before death occurs; and which is now known to be both a curable and preventable disease, duly merits the almost universal attention accorded the measures proposed for its cure, and for its prevention.

Only the wilfully blind now deny that the bacillus tuberculosis of Koch, carried in the sputum of the consumptive, is the common and almost universal means of spreading the disease. The probability of occasional infection through the milk of tuberculous cows is conceded, and the direct transmission of the disease to the child in utero is mentioned as an interesting but rare occurrence. On the other hand, it must be recognized that the so-called hereditary predisposition, the transmission by tuberculous parents to their children of physical characteristics which render their tissues peculiarly vulnerable to the attacks of the tubercle bacillus, is a factor which plays a very

prominent part in any consideration of this important question.

It is with the children that we must begin in the attempt to check the spread of the disease. Render the individual proof against the attacks of the bacillus, and the bacillus will soon disappear from the field of action. Take the child of tuberculous parents, or of parents who come of known tubercular stock, and who themselves present the tubercular type of physique, whether this has been apparently transmitted to the child or not, and put him through a course of training tending to increase his vital resistance. Reinforce his usually faulty and inadequate nutritive processes. Augment his deficient respiratory capacity, and toughen him by means of rubs and baths, and exercise. Insist on his living out of doors, and protect him against the debilitating effects of alcohol and tobacco and self-abuse.

Much has been written on the subject of medical supervision of the marriage license bureau, and particularly on the interdiction of marriage of tuberculous or phthisically predisposed individuals. In view of the fact that tuberculosis is very seldom directly transmitted, and of the great probability of successful prevention of infection, if careful attention be paid to proper sanitary measures let us allow Cupid and Hymen to play their game in a legitimate manner, and direct our efforts into channels which give promise of results.

Under intelligent and careful sanitary regulations, as proven by sanatorium statistics and professional experience, it is possible to live practically indefinitely with tuberculous individuals, without contracting the disease.

The municipal supervision and control of the ignorant or irresponsible or indigent tuberculous individual is recommended, for in the families of the very poor, and the vicious, the effective or intelligent application of preventive measures can hardly be hoped for. The incurable consumptive should be confined in a tuberculosis hospital, where much can be done for his comfort, and where he will not be a constant source of danger to his family, or to the community in which he lives. The curable consumptive should be interned in a tuberculosis sanatorium, where he will be under the constant supervision and control of trained physicians and intelligent attendants, and whence he will the sooner be returned to his family a bread winner. Not the least of the benefits derived from a stay in

the sanatorium, both by the patient and the community, is the knowledge gained by the consumptive and by him disseminated, of the sanitary treatment of the disease.

Among the intelligent and well-to-do, preventive measures can be easily and successfully carried out in the home. The sputum should be carefully collected and destroyed. Convenient receptacles with covers, if possible containing an antiseptic, should be carried by the patient, or arranged in easily accessible places about the house. When the cough is violent and explosive and flecks of sputum are apt to be scattered about, the patient should hold a small square of folded gauze before his mouth when he coughs. A mask seems barbarous and unnecessary, for the breath of the tuberculous individual is practically innocuous. It is the sputum, which dries on clothes and floors and walks, and is powdered and then blown into the air and inhaled, that is the chief source of danger. All apartments occupied by tuberculous individuals should be regularly disinfected, particularly those in which tuberculous individuals have died. So-called tuberculosis houses are common, and are unfortunately confounded with tuberculosis families, i. e., successive deaths in successive generations of the same family are attributed to hereditary transmission of the disease, when in reality they are due to direct infection by bacilli remaining on the walls and in the carpets and furniture, which latter in its distribution as heirloom property, is often the cause of widespread infection among members of a family weakened by an hereditary predisposition to the disease. The walls of such apartments should be thoroughly scraped and scrubbed with a 1-1000 sublimate solution, and then redecorated. All furniture should be thoroughly scrubbed with the same solution. Carpets and tapestry and bedding should be steam-cleaned, and uncleanable articles should be burned. While the bacillus tuberculosis does not multiply outside the living organism, it retains its vitality for years in dark and especially in damp places, and springs into renewed and virulent activity as soon as a favorable breeding place presents itself.

Spitting on floors and sidewalks should not only be forbidden, but prevented, and municipalities would find money expended for antiseptic cuspidors, placed in public buildings and street cars, and at regular intervals on all thoroughfares, a wise investment. These public cuspidors should be as common as mail boxes and would occasion little comment if spitters of

tobacco juice as well as spitters of tuberculous sputum were obliged to use them.

The exposure of candy and fruit and certain vegetables, not only by Italian push cart men, but by hucksters and first-class green grocers should be prohibited. Intestinal tuberculosis is especially liable to occur in children, particularly when there already exists a gastro-intestinal catarrh, a common summer condition among the regular customers of the street peddler.

School room floors should be thoroughly cleaned with sawdust and antiseptic solution, not only stirred up with a dry broom. Promiscuous kissing of children by grown people and by each other, and of grown people by each other, should be discouraged. So also, the kissing of things that have been blessed, and if a man of sanitary sense refuses to kiss the Bible his motive should not be misunderstood. The common communion cup should be condemned and the substitution of the individual cup enforced by municipal decree.

More attention should be paid by the general practitioner to the early diagnosis of tuberculosis and the public should be acquainted with the necessity for early attention to so-called ordinary colds. The physician is often consulted for the first time when the patient is already far advanced in the disease and has been expectorating tubercle bacilli by the million for months, with infection of members of his family an almost certain result. The early diagnosis of tuberculosis is one of the best general measures for its prevention.

When the general practitioner learns that it is not always necessary to wait until tubercle bacilli are present in the sputum of a patient before he dares to tell him as an introduction to a dissertation on the value of a warmer climate for the winter's sojourn, that his lungs are affected.

When municipal authorities everywhere learn the enormous economic value of measures which have in the past decade lessened the tuberculosis deathrate in New York City forty per cent. and have saved ten times their cost in hospital and municipal aid expense and in per capita earning power;

When the public learns, without undue alarm, that from the view point of personal safety cough and consumption spell synonymous terms and that an ounce of prevention is worth a pound of cure;

Then will the sanitary millennium have dawned. Man will already have been liberated from the grip of the ordinary in-

fectious and contagious diseases. Tuberculosis will rapidly disappear and the last of the bacilli will soon be languishing in innocuous desuetude. Posterity will be assured a heritage free from vitiating tendencies. The Oslerite of the period will have moved his zenith mark to four score years and his vigorous opponents of six score years and ten will recount to younger generations the time when King Tuberculosis yielded his scepter under coercion to the simple laws of public hygiene and individual right living.

FOUR CLINICAL CASES PRESENTING CONFUSING FACTORS IN DIAGNOSIS.

BY JAMES C. WOOD, A. M., M. D., CLEVELAND, OHIO.

(Read before the Surgical and Gynecological Association of the A. I. H., June 29, 1905.)

Case I.—Miss B., aet. 12, white, American. Parents both living and in good health. Family history on father's side good; tubercular history on mother's side. Has always been a frail child with enlarged cervical glands and much catarrhal trouble. Had measles at eight and has suffered from a hectic cough since. Was operated upon for enlarged tonsils and adenoids some three years before I saw her. On April 1, 1903, she was taken with distinct febrile symptoms which were supposed to be of malarial origin, but with no evidences of pelvic or abdominal trouble. There was, however, an aggravation of the bronchial trouble which caused her physician, Dr. S. E. Simmons, more or less anxiety, although the sputum at that time showed no tubercle bacilli.

Some 10 weeks after the attack in April, 1903, the abdomen became enlarged and there was a marked increase in temperature with decided aggravation of the bronchial trouble. Her symptoms gradually grew worse, the abdomen becoming enormously distended, until I saw her on June 12, 1903, in consultation with Drs. Simmons and Burt, of Norwalk, Ohio. It was, of course, not an easy thing to make a vaginal examination in a girl of 12, and as the abdominal pressure seemed to cause embarrassment of both respiration and circulation, it was

deemed best to remove the fluid. Upon its attempted removal, however, it was found purulent in character, and so thick as not to pass through a good sized trochar. On the following day an abdominal incision was made and nearly if not quite a gallon of pure pus was removed. During the operation, while the patient was under the anaesthetic, she had an intense fit of coughing, and a large quantity of pus escaped from the mouth through the lung. The resulting cavity after removing the abdominal fluid occupied at least two-thirds of the abdominal area, but in no way communicated with the peritoneal cavity. At no time while operating did I see or feel intestine, uterus, ovaries, tubes or any of the abdominal or pelvic organs. A double drainage tube was introduced and the patient was removed from the table more dead than alive. The convalescence, though protracted, was uninterrupted. The pus continued to discharge until January 1, 1904. At no time did it contain tubercle bacilli. The patient at this time, June 6, 1905, is a rugged, robust girl of 15, weighing 115 pounds. The lungs have cleared up and she is perfectly well. What was the diagnosis?

Case II.—Patient aet. 38, mother of one child, eight years of age. Was never strong as a girl and since the birth of her child has been an invalid the greater part of the time. No history of specific infection. Labor was not unusually difficult, but convalescence was long and tedious. Since the birth of her child she has suffered continuously with pain in the pelvis and her physician who treated her at that time reported that the uterus was fixed and that later on a mass could be felt in the Douglas pouch as well as on either side. She has had more or less menorrhagia, is extremely emaciated, is very sensitive throughout the pelvis, and has cold hands and cold feet, indigestion, constipation.

A few weeks ago I opened the abdomen to find a parovarian cyst of the right side, the size of a double fist, containing a dark colored fluid. This cyst was intimately adherent deep in the pelvis. On the left side a small cyst was dug out of a mass of inflammatory exudates. The ovary of this side was a mere shell and full of pus. In tying off the pedicles with catgut, the stumps were so fragile that it was almost impossible to control the hemorrhage by means of ligatures. The precaution was taken to reinforce the pedicle ligatures with a running catgut suture extending the entire length of the broad

ligament. The appendix was closely adherent to and wrapped about the caecum in such a way as to diminish the calibre of the gut. It was therefore removed and the stump inverted. The pelvic floor was greatly relaxed and after the abdomen was closed in the usual way the pelvic floor was repaired by means of the flap-splitting operation. The patient was removed from the table in fairly good shape, her pulse being 130. She was returned to her bed and at 2 P. M., her pulse was 100 and her condition was in every way favorable. I saw her 30 minutes later and much to my surprise found her in collapse. The skin was cold and clammy, the pulse could not be felt at the wrists, the respiration was somewhat rapid, though not markedly increased. There was no marked pallor of the features, there was no sighing respiration, there was no restlessness, the pupils were not disturbed, there was but slight abdominal pain.

The foregoing symptoms are especially emphasized by all surgeons as being characteristic of internal hemorrhage. It did not seem to me that it was a case of internal hemorrhage, and I therefore resorted to a saline infusion with active skin stimulation, the usual posture, etc. She rapidly grew worse, and in 30 minutes I saw that she was going to die unless something were done immediately. The abdomen was then opened and found full of blood, the ligature of the left side having cut through the pedicle. This was speedily secured, the blood clots removed, and abdomen filled full of salt solution and quickly closed. She did not rally from the second operation, and died 20 minutes from the time the abdomen was opened.

Let me cite for you, if you please, the symptoms of concealed hemorrhage given in a most classical work on diagnosis: (1) "Pain may or may not be present, depending on the nature of the lesion which causes the hemorrhage. The face becomes pallid, pinched and anxious and the extremities are cold. The surface of the body is covered with perspiration. The respirations are shallow and sighing, the patient gapes repeatedly, and urgently desires more air. There is great restlessness with turning of the body from side to side. The radial pulse is rapid, weak and thready and may become imperceptible. The mind may be clear, but more commonly there is delirium. Nausea is usually present and vomiting may take place."

The same author gives the following symptoms as indicative of shock: ²"The symptoms of shock or collapse are pallor,

anxious expression, lowered temperature, perspiring skin, thready or imperceptible pulse, intense weakness, and intact or impaired intellection. This condition may develop rapidly or slowly, usually the former."

There is yet much to be desired in data enabling us to differentiate between concealed hemorrhage and shock. It is a theme well worthy of serious discussion on the part of all physicians, and especially all abdominal surgeons. I sincerely hope that such discussion will be brought out in dealing with this paper.

Case III.—Mrs. M. aet. 22. One child three years of age. Four and one-half months pregnant in her second pregnancy. Dr. E. O. Adams, of Cleveland, was called to see her March 9, 1905. She gave a history of having had during the two months preceding the time he first saw her, three attacks of what her attending physician had diagnosed as "renal colic." At that time she presented the following symptoms, which persisted up to the time the doctor saw her: There was severe pain beginning in the region of the left kidney, extending down into the groin of the corresponding side, involving the neck of the bladder, vulva and right side of the thigh; frequent desire to urinate with passage of a small amount of urine, which contained pus and renal cells. The usual treatment for the relief of the pain was instituted with but temporary relief. The pain was so severe that for three days preceding the operation it became necessary to give hypodermatically two grains of morphine every 24 hours. The doctor found upon physical examination at this time a tumor in the left hypochondriac region close under the costal margin. This tumor was slightly mobile, but could not be pushed down into the pelvis. It was smooth and seemingly cystic to the touch. A diagnosis of a probable hydronephrosis as a result of ureteral obstruction was made. On the morning of March 17th, the temperature began to rise, and the thermometer registered 100.4° F. She was taken to the hospital on this day and turned over to me.

Examination without an anaesthetic showed no evidence of the tumor springing from the pelvis, although the size of the uterus made it impossible to make a bimanual sufficiently well to outline the pelvic attachments of the growth. The symptoms pointed so clearly to a pyo- or hydro-nephrosis that I deemed it best to make an exploratory incision over the mass. I did not feel sufficient confidence in my diagnosis to explore

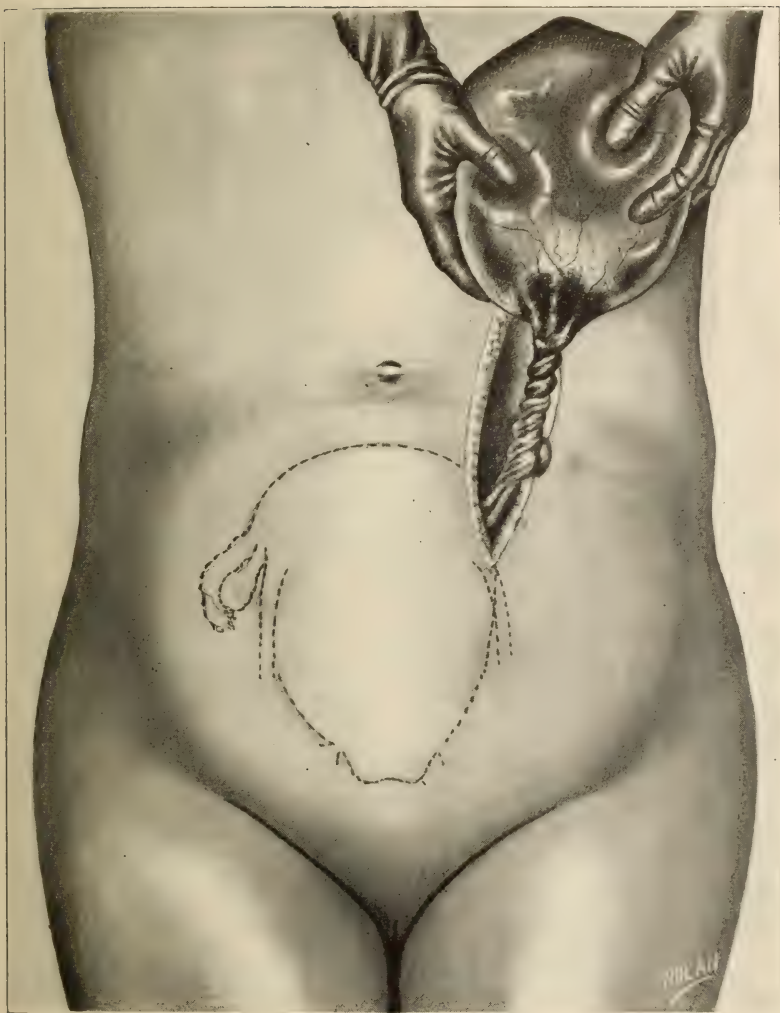


FIG. 1. PEDUNCULATED CYST, SIMULATING A TUMOR OF THE KIDNEY.

through the back. On opening the abdomen over the mass there was found a bluish tumor the size of an adult head, with a pedicle leading down into the pelvis, which felt exactly like a distended ureter. (See Fig. 1.) Effort was made to draw off the fluid by aspiration, but it was so thick that it would not pass through the aspirating needle. After closing the puncture made by the needle with a circular catgut suture, the incision was enlarged and the tumor delivered *en masse*. It was in front of the colon and pressed hard against the diaphragm. The omentum was adherent to the tumor, which was twisted upon itself to the left six times. The pedicle was eight inches long. All the necrotic tissue was cut away and the stump cauterized and covered with peritoneum. The wound was closed with interrupted silkwormgut sutures. The patient was removed from the table in good shape and her convalescence was ideal. She had no bad symptoms and at no time did the uterus threaten to empty itself.

This case is interesting because it shows the difficulty of differentiating an ovarian cyst with a long pedicle from a tumor of the kidney. The pregnancy complicated matters in that it was difficult to trace the pedicle down into the pelvis because of the size of the uterus. The twisting of the pedicle undoubtedly gave rise to the inflammatory symptoms which were present, and the symptoms which so closely resembled renal colic. It is more than probable that the urinary symptoms were purely incidental. Their presence made me so sure of a kidney lesion that I did not do what perhaps it would have been well to do, namely, collect the urine from each kidney separately. This at least would have been a refinement in diagnosis, but I do not think that the necessity of so doing in this case appeals to the practical abdominal surgeon very strongly. The facts are that there was an intra-abdominal growth of some kind just below the diaphragm and in the region of the kidney, which was giving rise to serious inconvenience and menacing the life of the patient. The indications were clearly to explore and relieve the patient of her condition if possible. I present the case for criticism and for the purpose of provoking discussion.

Case IV.—The following case is of interest, showing the difficulty in differentiating between a distension of the gall-bladder, appendicitis and lesions of the kidney. Mrs. M., aet. 55. Has had repeated attacks of pain and inflammation on the

right side which had been diagnosed by several excellent physicians as appendicitis. The heart's action was very irregular, with a marked mitral insufficiency. There was an irregular tumor, somewhat mobile, extending from the region of the gall bladder down into the pelvis, but evidently not connected with the uterus. I could not determine the nature of the growth, and thought possibly it was an enlarged kidney. On making an incision over the most prominent part of the tumor, nearly a pint of pus escaped, and in the upper part of the cavity there was found a gall-stone two and one-half inches long, and one and one-half inches in diameter, weighing 740 grains. This was easily delivered and by means of irrigation, several small stones were washed out. The enormously distended gall-bladder was attached throughout its entire length to the anterior abdominal wall on the right side. All that there was necessary to do therefore was to insert a drainage tube into the lower end of the wound and close the wound in the usual manner. The patient came very near succumbing to heart failure during the operation, but finally rallied and made an ideal convalescence. The operation was done December 12, 1901, and she is perfectly well to-day, with the exception of the heart lesion.

THE CLINICAL SIGNIFICANCE OF IRREGULAR PULSE.

(Read before the Wednesday Night Medical Club, April, 1905.)

BY G. MORRIS GOLDEN, M. D., PHILADELPHIA, PA.

In studying the pulse and its irregularities, one cannot attempt to go into a minute description of its many forms, phases and causes, on account of the magnitude of the subject; but allow me for simplicity sake to group them under one heading and term it Irregularity, so that it may be possible to point out its significance, whether occurring in either an apparently healthy individual or in one suffering from disease.

It is a well known fact, how readily, and with what ease an irregular pulse is recognized, but there is probably no other abnormality whose clinical significance is harder to interpret, or which is so shrouded in mystery, as that of irregular pulse, when it devolves upon us to give a plausible, intelligent cause

and effect of same. When once discovered, we at once turn our attention to what it means, and what its effect upon the patient's health, or length of life. We are frequently met by patients who have been told of the presence of an irregular pulse, and of the awful calamities that may follow it. Thus what else can we expect when such men as Traube, who was the first to call attention to the *pulsus bigeminus*, looked upon it as of fatal significance. Tripiier thought when not due to digitalis, or valvular disease was associated with epilepsy, while Richardson thought that the missed beat was a sign of impending dissolution, while in the majority of the recent text-books the subject is dealt with in a meagre vague manner.

There are two factors to be considered in studying irregularities, those of rhythm and force; as most frequently happens, it is irregular in both respects, but that of force being the most important. Mackenzie in his study of the pulse has classified irregularities into two types, "The youthful and adult types of irregularity."

Suffice it to say of the youthful type, that the irregularity occurs through variation in the duration of the diastolic period of the cardiac cycle—in contrast to the adult type—where there is a variation in duration of the systolic period as well as the diastolic period of the cycle.

The youthful type is most frequently observed after the exhausting fevers, with a slowing of the pulse. May frequently be noticed in their younger years, without any apparent cause, and the probability is that every child has a slight irregularity at some period of its life, before the pulse reaches its normal physiological equilibrium of 72 beats per minute.

Let us now consider the significance of the irregularities as occurring in the adult. The question arises, Does irregular pulse occur in an apparently healthy individual? We may answer for all clinical purposes that it does. You have no doubt observed many times, irregular pulse, exhibited by patients, without any apparent signs of ill health, or this same patient may pass through a serious illness, probably one of the acute infectious type without showing any signs of a cardiac dissolution, or on the other hand may occur in one doing hard laborious work, and this patient go on for years without any inconvenience. There surely cannot be any marked material or structural changes in such a heart.

The relation of pulse irregularities to the several heart condi-

tions is important. First of all it must be borne in mind that it is a symptom only, and only *one*, that it is not a name for a mass of complex symptoms, or a disease, but as was said above, is but one symptom, in forming our clinical picture.

Its presence in the mitral lesions is well known by its early appearance, and persistency, which is especially true of a mitral stenosis. Frequently the irregularities of a mitral lesion may not be detected when patient at rest, but upon slightest exertion, it will evidence itself. At times it is amazing to find marked irregularities, both as to force and rhythm, and these patients go on for probably years, able to do light work and enjoying comparatively good health. Contrast this condition with the similiar conditions arising in Aortic lesions. It is here that it does not occur until late, after marked sclerotic or myocardial changes have taken place and impending dissolution is evident, and is of far more significance, in telling us of the exact condition of affairs, and what we may expect, as in relation to the same condition occurring in a mitral lesion.

Of myocardial changes, it is particularly significant, and is looked upon as pathognomonic of that condition, and probably the most important symptom to render a diagnosis, accompanied by a weakened muscular sound at the apex. As an accompaniment of failing heart, irregularity is frequently present, whatever the cause of the failure may be, whether myocardial, valvular disease, atheromatous changes, or a Bright's. But in these conditions it is not the salient point or symptom, it depending upon the associated conditions present, and the nutrition, especially that of the heart muscle.

In the various neuroses of the heart, irregularities are present, also from the effect of various toxic substances, such as certain drugs, tea, coffee, alcohol, tobacco, and digitalis, but these irregularities upon examination will be found not to be rhythmical, that is they occur at intervals of varying length, and not continuous as that of a bigeminal or trigeminal pulse. Cases of this kind are seen frequently and their bad effects have little significance as to a bad prognosis, except after the removal of the exciting cause, the condition still persists.

There are a certain number of people, who after having passed middle life, show irregularities of the pulse, these are quite common, and are only detected at intervals, the condition not being constant as evidenced by repeated examinations in which it is absent, or by some exertion or excitement it may be pro-

duced. The causes may in all probability be looked for in some atheromatous or myocardial changes. Some of these patients in which slight irregularities have been noted, have succumbed to a sudden death.

After what has been said of irregularities as referred to the several heart conditions, have we any means at our disposal to determine just how much it may mean? First of all let me impress the one fact that an irregular pulse is a symptom only, occurring in any of the heart conditions, and not truly pathognomonic of any one. Hence its true significance cannot be determined unless a thorough and systematic examination is made of the heart, and the other organs that may be concerned, finding out as far as possible their exact conditions. Another point is the nutrition of the patient, and as was mentioned before, especially that of the heart muscle, combined as far as possible with the supposed pathological changes in the various organs, and the impaired functions of same, by studying these features we may arrive at a somewhat reasonable conclusion, as to just how much is demanded of the heart to carry on its proper work. As to the amount of work the heart is capable of enduring. Mackenzie has described what he terms the "Cardiac Field of Response," which is the amount of work the heart is capable of doing before showing signs of cardiac weakness. This field gradually expands until middle life, after which it gradually diminishes. This is best illustrated by an example. Thus, take two patients suffering from a cardiac condition, both evidencing irregularities of pulse, these patients at rest appear to be in apparent comfort. The one on moving about develops more markedly his shortness of breath, cough, dizziness, accelerated pulse and irregularity, we say this man has a contracted "Field of Response." The other patient on moving about finds no aggravation of symptoms, and is apparently easy, in this one we may say the "Field of Response" is good—and of the former case we are compelled to take a grave view of the condition. Why is it that these patients practically appear the same at rest? I think this is satisfactorily explained by Mackenzie when he states: "That a certain amount of arterial pressure must be maintained in order to have the proper functions of the organs developed. In the former case it has taken all of the reserve force of the heart, or as was termed the "Field of Response," has reached its limit when the patient was at rest, and on mo-

tion this response was surpassed, and an aggravation of the symptoms ensued, while in the latter case, the whole field of response was not called into force during rest and one's symptoms were thereby not aggravated by motion.

Frequently we are met with irregular pulse in pregnancy. I have seen it on several occasions, but without any bad effects, both of the cases being multipera. It cannot be the result of a very markedly damaged heart, for there is probably no better test of the heart's ability than the work entailed upon it by pregnancy and labor.

Let us now consider the relation of irregular pulse to febrile conditions. The tendency of fever is to quicken the pulse, and upon acceleration of the pulse, the irregularity disappears. This being looked upon as a favorable sign. This fact holds true no matter what the stimulus may be, whether fever, excitement, or muscular exertion. On the contrary, if this increase of rate in the pulse is followed by the irregularity being more marked, we have a heart that needs constant watching, and may cause serious trouble. The stage of a febrile condition in which the irregularity appears is significant the earlier the more grave—this being well marked in croupous pneumonia, for those cases developing an irregular pulse before the crisis are invariably fatal; Mackenzie stating he has never seen an exception to the rule.

Its significance is probably not so marked in the catarrhal type, and in the aged. I call to mind two cases of such type during the past winter in the aged with a catarrhal pneumonia—their ages being respectively 81 and 86 years—and both showing irregular pulse at intervals during the course of the disease, but not at its inception; both cases recovered. The probability is that these patients had irregular pulse before their illness, which disappeared under the stimulating effect of the fever. The opposite condition is frequently encountered, that is the appearance of an irregularity on the subsidence of fever which follows the acute infectious diseases, especially that of typhoid and pneumonia. It is here the result of exhaustion and malnutrition, and calls for forced feeding and rest. The association of irregularities with the various mental diseases has been noticed, it is a casual one, and other factors are to be considered, as being causative.

After this hasty resume, what may be said as regards the significance of an irregular pulse? It must not be supposed that

no significance whatever is attached to an irregular pulse. We should not jump at conclusions, and give a hasty opinion of a grave character. It is frequently present in persons dangerously ill with a cardiac disease, but it is one symptom only, indicating cardiac weakness, and it devolves upon us to make a thorough examination of our condition at hand, before we come to any definite conclusion. It may be the first sign of an impending trouble, when associated with other diseased conditions, but when an irregularity is present, with a satisfactory heart, and the only symptom present, it is then that the terrible consequences of such a condition should not be harbored. The future of a case, as was said before, depends upon the general condition, or again the disease we have to deal with. For instance a person with rheumatic fever may have an occasional irregular pulse, with a slowing, its terrors are not great; on the other side picture a case of croupous pneumonia, with high temperature, and showing an irregular pulse, our prognosis has a dreary outlook.

As associated with heart conditions, we should not draw conclusions without reference to other cardiac requisites, especially the presence of any valvular lesion and their relative significance. Condition of heart muscles, not as to strength alone, but also nutrition. Evidences of any sclerotic change, and lastly general nutrition of the patient.

Allow me to say in closing that we should not place too much significance upon an irregular pulse, as an only symptom, but consider the associated conditions carefully, weigh each factor thoroughly, and the value of each before coming to a definite conclusion, and lastly do not depend upon the pulse alone as a guide to the cardiac condition.

ADENOIDS, FROM THE STANDPOINT OF THE GENERAL PRACTITIONER.

BY H. A. HARRISON, UTICA, N. Y.

(Read before the American Institute of Homœopathy, Chicago, June, 1905.)

Many hundreds of years ago, before Christopher Columbus was born, the knowledge of the civilized world was limited to a small area about the borders of the Mediterranean Sea, and if we go back further in the history of man we will find that the part of the world best known was as the great East, now known

as the Chinese Empire. But America existed then just the same.

Before Newton lived and noted the fall of the apple and studied the reason of its fall, the law of gravitation existed. The world and the people in it were subject then as now to the law. Ignorance of the law did not make one the less subservient to it.

Before Harvey lived and discovered the circulation of the blood, the arteries were not supposed to convey the life-giving blood. But such was the case then as now.

To-day the existence of America, the law of gravitation and the circulation of the blood are everywhere recognized as facts. But they were facts and existed the same as to-day before Columbus, Newton or Harvey lived.

Without doubt there are many people to-day whose deafness or other deformities are living monuments to the ignorance of the physicians who have been employed to treat them. There is no other profession where the increase of knowledge is so rapid, where such constant study to keep abreast the times is necessary as in medicine. Else, why is it that to-day many diseases are recognized and successfully treated which formerly were not known or understood.

There are two varieties of ignorance to which I wish to allude; first, the ignorance of diseases as yet not understood. All physicians, even the most skilled are included in this class. The other is the ignorance of some physicians about certain diseases concerning which some other physicians are well versed. This ignorance is not necessarily culpable because no general practitioner is supposed to know about every branch of medicine all the eminent specialist knows about his respective branch. But the general practitioner should know enough to recognize indications of all abnormal conditions and when they are beyond his skill to treat, as well as some specialist, it is his duty to the patient to refer him to some specialist, and it is the duty of the specialist to turn the patient back in due time.

Adenoids, the subject of my paper, are very common in children and young people up to the age of 15 years, and occasionally are met in adults. Every physician here knows what adenoids are, their symptoms and treatment, and perhaps I should not take up your time with this paper, but I shall be brief. An enlarged and hypertrophied tonsil can usually be seen without much trouble. An enlarged and hypertrophied third tonsil or

an adenoid is really very similar to an enlarged faucial tonsil. These adenoid growths vary considerably in size and consistency, at times occupying the posterior vault only, again the entire central region or extending laterally into the fossæ of Rosenmüller, and even over the Eustachian orifices. In consistency varying from a very soft spongy, friable mass to one fibrous, dense and with firmer resisting outer walls. It must be evident from the location of the growth that the sense of sight can be of little use in the determination of its nature or extent or in its removal, it being necessary to rely almost wholly on the sense of touch to give us any accurate knowledge on the subject. We may examine the nostril anteriorly by a speculum or posteriorly by the rhinoscopic mirror, but we cannot learn much of these growths in this manner and we must always complete our diagnosis by a digital examination and really depending almost entirely on it. This examination is best made by seating the child in a chair or letting him stand by your side, and encircling his head with one arm and gently, but very firmly, holding it to your side. Have the child open his mouth, and at the same time carefully press the child's cheek between his teeth with the fingers of your hand holding his head. This is to prevent your being bitten. Then with the index finger of the free hand quickly explore the naso-pharynx and the region back of and above the soft palate. This examination is the one on which we rely. It determines the extent, location and nature of the growth.

Consider briefly some of the symptoms of adenoids. A child is brought to your office who is troubled with mouth breathing. He snores at night. He often wakes at night and wants a drink of water, because his mouth is dry. His eyes may be somewhat prominent. His half open mouth and his hanging lower jaw give him an appearance of stupidity. And worse than all this the air cavities communicating with the nose suffer arrested development, consequently the bones containing the frontal, maxillary, sphenoidal and ethmoidal sinuses cease developing as they should and we have in a short time a characteristic facial expression that approaches a deformity. The elevation of the palate arch which results causes a lateral deviation or buckling of the nasal septum and this in turn interferes with the drainage of the nasal cavities and may make nasal respiration impossible.

Deafness as a result is caused by the hypertrophied tissue en-

croaching on the Eustachian tube. I foresee that the careful intelligent treatment that our cases of adenoids are receiving will have the effect of lessening the number of people suffering from deafness in the coming generations.

The sense of smell is often more or less interfered with. Swallowing is sometimes difficult.

The voice is affected. Becoming thickened or muffled. Some consonants are difficult to articulate, b sounds like n, d like m, and g is a very hard sound to make.

From the above it will be seen that the diagnosis is not difficult. In determining the treatment, several factors are to be considered, viz., the general condition of the patient, the existence of any constitutional disease, the presence of acute inflammation, and mechanically caused conditions, as interference with the middle ear function.

If there are no urgent symptoms, it is better practice to try the effect of remedies and local astringents for a few months. If there is no improvement after a reasonable time, the growths should be removed. The most urgent cases are those complicated by middle ear trouble, and these should be operated at once. Nearly every other form can safely be treated with remedies and local measures for a reasonable time. Cases accompanied by impaired nutrition, indigestion, cough, disturbed sleep or enuresis can be safely treated with remedies and often cured.

As to surgical treatment different surgeons employ different operations, and each may be equally good. However each time you operate be careful and remove every bit of the diseased tissue. Whether you use an adenotome or a curette or a forceps matters little. If you do good clean work the likelihood of the trouble recurring is slight.

Children should be anæsthetized for the operation. In adults a local anæsthetic is usually ample.

After the operation, firmly holding a pledget of cotton saturated with peroxide of hydrogen against the bleeding surface will materially aid in stopping the hæmorrhage.

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, M. D., BALTIMORE, MD.

BENZOIC ACID.

Therapeutic Action.—*Concretions in the joints*, when resulting from rheumatism or gout, with red urine having a strong odor. It is likewise recommended for syphilitic rheumatism of the joints, where this peculiar character of the urine is present.

Bladder, Affections of the.—Benzoic acid has been successfully used in various affections of the bladder, including irritated and inflamed states of the organ of various degrees of intensity. The following symptoms will indicate the drug: Vesical catarrh; irritability of the bladder; nocturnal enuresis in children; too frequent desire to evacuate the bladder, the urine being normal in appearance; decrease of the quantity of urine; urine aromatic; urine of a very repulsive odor when freshly voided, of a changeable color, brownish, cloudy, of an alkaline reaction; dark, reddish-brown urine, of greater specific gravity than normal urine, with an acid reaction; excess of uric acid; the patient is pale, languid, with a feeling of weakness in the loins; fleeting pains in the region of the bladder; a granular mucus, mixed with phosphates, in the sediment of the urine.

Nocturnal Enuresis.—Benzoic acid is of especial value in the treatment of nocturnal enuresis, when the urine is very highly colored, of an aromatic or, at times, very repulsive odor; there will probably be an excess of uric acid and a high specific gravity of the urine; irritability of the bladder; languor of the patient.

The key-note of the drug is: Urine scanty, of dark brown color, and the urinous odor highly intensified.

In *Rheumatism* these symptoms are often present, and when such is the case, the drug cures promptly.

To render the drug effectual there must be two conditions present, namely: the peculiarity of the urine and a rheumatic diathesis of the patient.

BRYONIA ALBA.

The active principle of bryonia is probably the neutral body bryonine, which appears to be a glucoside. It exists, when

separated, in white amorphous masses, of very bitter taste; is readily soluble in water and alcohol.

Physiological Action.—The poisonous effects of bryonia have long been known, the medicine having once been a favorite with the French physicians, who noticed, however, that in overdoses it often produces violent sickness, griping, watery evacuations, and fainting; some of the cases ended fatally. Orfila's experiments upon animals proved that the root is a violent irritant; introduced into the stomach, it caused intense and fatal gastritis; into the pleura, it caused fatal pleurisy, with fibrinous effusion.

Administered in moderate doses bryonia is purgative, and may be employed with advantage, provided that care be taken to suspend the use, should the irritant effects become developed. In this case opiates or cordials must be resorted to. Bryonine, in doses of three to four grains, is a violent poison; in doses of one-sixth to one-third grain is a drastic purgative.

The medicinal reputation of bryonia is very ancient.

In Epilepsy, the juice was administered in the time of Dioscorides; the upper part of the root was laid bare, and a hole scooped in it, which in a few hours became filled. This method has been followed for the same purpose in our own day.

In Hysteria, it was recommended by Matthiolus in the 16th century.

In Mania it was formerly much relied upon—i. e., in days when this malady was habitually treated by free purgation. Among other authorities in its favor is found Sydenham. For all these purposes, however, it is probable that bryonia has been justly superseded by other remedies.

As a Drastic Purgative in dropsy it has been recommended, and might still be well employed. Dr. Pearson's opinion was that it would very well supply the place of jalap in our hospitals. He considers the infusion to be the best form of administration; half an ounce of the dried root should be placed in a pint of boiling water, to which should be added an ounce of spirit of juniper; of this preparation a wineglassful should be taken every four hours until copious watery motions are induced.

In dropsical cases the infusion, given as above recommended, not merely purges, but also produces a vigorous action of the kidneys—a circumstance that appears to point to bryonia as a specially valuable drug in cases where it is desirable to get rid very rapidly of large accumulations of fluid. A good deal of

care, however, is required, the known tendency of bryonia being to depress the action of the heart.

In pleurisy, and other Serous Inflammations, bryonia is an exceedingly valuable drug; it is usually in the second stage, in which general pyrexia has diminished or disappeared, but exudation continues, that the best effects of this remedy are seen. It is in just these cases, in which aconite is so effectively employed in the earlier feverish stage, that bryonia afterwards proves most useful; it limits the extent of serous effusion, and actively helps its removal by absorption.

Bryonia is more especially effective in pericarditis and in pleurisy; in these maladies it fully equals any remedy that exists.

In Pleuropneumonia, bryonia is often of great service; here, as in simple pleurisy, it both limits effusion and assists absorption.

In Rheumatism, of various forms, it has also proved useful; but although it will sometimes relieve joints that are swollen, it is more especially the merely painful and stiff rheumatism joints that are benefitted by this drug.

In Liver Affections of various kinds, and also in the ordinary bilious headache with vomiting, bryonia is worthy of commendation.

The most characteristic expressions of bryonia are its stitching, tearing pains, and the aggravation of all its symptoms by motion.

KEY NOTES.—Very morose, ill-humored; inclined to needless anxiety; fright, fear and vexation.

Exceedingly irritable and inclined to be angry.

Vertigo; as if head were turning in a circle; on rising from the chair.

Headache commences in the morning, not on waking, but when first opening the eyes.

Headache as if everything would press out of the forehead; worse on stooping.

Pressive pain over the left eye, followed by dull pressive pains in occipital protuberances; thence spreading over the whole body; on quick motion and after eating, pain so severe that it seemed a distinct pulsation within the head.

Slight drawing in the temporal bones from above downwards towards zygoma.

Pressive pains in the occiput, drawing down into neck; relieved towards noon.

Nosebleed, especially in morning when rising.

Hot, red, soft puffiness of the face.

Great dryness of mouth, lips and tongue.

Toothache relieved by cold water; aggravated by lying on painless side, goes away if one lies on painful side.

Tongue thickly coated white.

Taste intensely bitter.

Frequent drinking of cold water relieves the bitter taste and the inclination to vomit.

Excessive thirst; desire for large quantities of water.

Pressure in stomach after eating, as from a stone; makes him fretful.

Epigastric region painful to touch and pressure.

Passage of offensive flatus.

Stools followed by burning in anus.

Stools offensive, pasty or bilious and acrid.

Obstinate constipation, stools large, hard and dry as if burnt, with great effort.

Urine dark, almost brown.

Coming into warm room from cold air excites a cough.

Intense sticking pains or stitches in chest; can not bear to move or draw a deep breath.

Weariness and heaviness in all the limbs; weakness; stiffness.

Joints red, swelling stiff, with stitching pains from slightest motion.

Tensive painful stiffness of the knees.

Hot swelling of the feet; of instep, with bruised pain on stretching out the feet.

Great weakness and exhaustion, worse from walking.

Sitting up in bed causes nausea and fainting.

Red, round hot spot on the cheek over the malar bone.

Dreams; about business or household affairs.

HOMŒOPATHIC USES OF BRYONIA.

Bryonia may be of advantage in hemicrania of a rheumatic, arthritic or nervous character. Our recorded provings show that the headaches to which bryonia is homœopathic, are characterized by congestive symptoms. This may be inferred from such records as these: Rush of blood to the head, after which the head feels compressed from temple to temple; violent headache, the head feeling very heavy, with pressure in the brain

from within outward, and great desire to lie down; headache, when stooping, as if the brain would press out at the forehead; headache as if the skull would be pressed asunder; congestion of blood to the head, with heat in the head.

According to our records, it seems characteristic of the bryonia headache to set in principally in the morning on awakening, and to become aggravated by movement, particularly by opening and moving the eyes.

Bryonia seems to be particularly adapted to rheumatic inflammations and to phlegmonous inflammations that have passed into the second stage, a stage characterized by phenomena denoting effusions into cavities or infiltrations into parenchymatous tissue. In pneumonia, hepatitis, peritonitis, meningitis, pleuritis, enteritis, and in bronchitis, bryonia is indicated when exudations into the cerebral, pleural or peritoneal cavities, or into the parenchyma of the lungs or liver, threaten or have actually taken place. Such exudations occur in the second stage of these diseases, and are always accompanied by a more marked development of the nervous symptoms. The pulse becomes more hurried, feebler, less resisting to the touch. Muttering delirium may set in; spasmodic twitchings and even convulsions may mark the beginning of the exudative process. The consciousness becomes disturbed; the breathing is more oppressed and superficial, especially if the respiratory organs are the seat of the effusion. If the exudation takes place into cavities, the region of the cavity is often distended externally. This may be the case in the region of the pleural and peritoneal cavities, and even the head may swell up under the pressure of the effused fluid.

Bryonia is recommended in *cerebro-spinal meningitis* when there are sharp, lancinating pains in the head, worse from motion, better from lying down; sensation, when stooping, as if the contents of the head would issue from the forehead; face red and bloated, and redness of the conjunctiva; neck stiff; pains in the joints and limbs, very much worse from motion.

In *peritonitis*, particularly when of a rheumatic type, with stinging and burning pains, sensitiveness of the abdomen to the touch, constipation, or even the opposite condition tending to diarrhœic discharges, consisting of mucus and blood, with tenesmus and griping or shooting pains, bryonia will materially aid the process of recovery.

It is particularly in inflammatory affections of the respiratory

organs, the lungs and their enveloping membrane, that bryonia has been found eminently useful; not, however, in the first invasion of the disease, but after the synochal form has been subdued by aconite. We shall find bryonia useful in *pneumonitis*, characterized by stitching pains, burning distress in the lungs, tearing cough, expectoration of a tenacious, bloody, greenish, yellowish matter, sallow and even jaundiced complexion. It is a favorite remedy in

Typhoid Pneumonia, with bloated countenance, dryness of the tongue, difficult speech, rather hard, full pulse, oppression of the chest, with tolerably easy respiration; dryness of the tongue; fever mixed with chills at the outset of the attack; tendency to brain trouble, with sopor and delirium.

Pleuritis with stitching pains all through the chest and in the diaphragm, worse from the slightest motion, causing hurried, superficial breathing; better in cold air and from drinking water.

Bronchitis, acute and chronic, with stinging and burning in the air-passages; paroxysms of tearing and fatiguing cough, with expectoration of a frothy mucus which may be streaked with blood and later assume a yellow color and puriform character. Tickling in the throat; short, oppressed breathing. In

Rheumatic Inflammations, acute or chronic, bryonia is a remedy of prime importance. It affects especially the fibrous, serous and muscular tissue. The pains are tearing, creeping, burning, stitching and *always aggravated by motion*. If the inflammation has attacked the joints, this remedy will be found particularly valuable; if the swelling is pale, hot, tense, if there is rigidity and soreness of the parts and if exudation into the cavity of the joint threatens. If the inflammation has assumed the erysipelatous form, bryonia may still be indicated.

Bryonia causes a tearing pain in the teeth, which is aggravated by heat; the tooth feels elongated; contact causes the pain to shift from one tooth to another. A fine flashing pain through the teeth is characteristic of bryonia.

Bryonia causes a flat, sweetish, sickly, nauseous taste; also a foul taste; the food tastes bitter or is entirely tasteless. Before breakfast or even after a meal, the taste in the mouth is bitter. Loss of appetite, violent thirst, desire for many things which cannot be eaten.

The changes of taste should be considered as symptomatic of some more general gastric derangement; the fitful or strange

desire for articles which are not eatable may exist in hysteria or during pregnancy.

Sour and bitter eructations; nausea with ptyalism; empty retching, with spitting up of water and mucus, coldness of the body; vomiting of the ingesta; bitter vomiting of bile and water; bloody vomiting are symptoms characteristic of gastric derangements generally, and may likewise occur in gastric and bilious fevers.

Small doses of bryonia have a tendency to constipate the bowels, hence in constipation if the stools are hard, of large size, and deficient in intestinal mucus, bryonia, if administered in small doses, may be of great use to the patient. In a more general group of symptoms to which bryonia is homœopathic, the existence of constipation may afford additional evidence regarding the curative adaptation of this agent to the case before us.

Let us not forget that a large dose of bryonia may act as a cathartic or drastic agent, and that the acrid principle of this drug may cause bloody and mucous discharges from the bowels, attended with cutting and burning pains and with more or less urging in the lower bowels. These symptoms may indicate bryonia in diarrhœa, preceded by burning pains in the rectum; diarrhœa which it is almost impossible to retain; bloody diarrhœa, watery, or diarrhœa preceded by hard stool, and accompanied by fermentation in the bowels.

In *Dysenteric Diarrhœa*, with sickening feeling in the bowels, lancinating and tearing pain in the larger bowels, discharge of mucus and blood, bryonia may afford relief.

Small doses of bryonia cause a sensation as if the urethra were too narrow; large doses cause a violent desire to urinate, with sensation, after urinating, as if the bladder had not been entirely emptied. This feeling of weakness may occur in

Paralytic Rheumatic Affections of the bladder, especially in the case of old persons and hysteric women. It may likewise be an accompanying symptom in rheumatic irritations of the bowels, with tendency to diarrhœa.

Large doses of bryonia cause profuse and premature menstruation, even metrorrhagia, with discharge of dark blood, pain in the small of the back and headache.

In *Mastitis*, when the breasts are gorged with milk, bryonia may do much good; the secretion of milk is arrested, and the mammae become hard.

Bryonia causes and may therefore cure a rash like the rash with which lying-in women and nursing infants are sometimes afflicted. It also causes a species of herpes furfuraceous, with burning and itching; likewise an eruption resembling measles, which is brought out by rubbing and scratching the parts.

In a case of measles, bryonia may help to bring out the eruption upon the chest, if it should seem to have settled upon the lungs, causing an inflammatory irritation of this organ which may speedily lead to effusion and paralysis.

Bryonia causes a yellow color of the skin. Guided by this symptom, we may administer it in jaundice, where it will be found useful if the attack was caused by a fit of angry passion, disappointment, or if the attack seems to arise from liver complaint, partial induration, chronic hepatitis, with soreness, heat, stinging pains and swelling in the region of the liver. The gastric symptoms should likewise correspond with the physiological action of this drug.

Upon examining the symptoms which characterize the action of bryonia as a fever-exciting agent, we shall discover an absence of those signs, which characterize the action of aconite. There is no violent chill, only some chilly creepings, coldness of the skin, followed by irregular flashes of heat; the heat is either felt internally or externally, or both at the same time; it is generally a burning fever of the gastric, bilious, mucous or rheumatic type, with characteristic indications already given.

In *Typhoid Fever*, with dizziness, shooting, tearing pains in the head, throat, chest, abdomen, etc., worse upon the slightest motion, vomiting, heat, thirst, hemorrhages, nocturnal restlessness, tremors of the hands, unsteady, wild look, indistinct speech, violent delirium, desire to escape; foul, sore tongue, diarrhoea, tympanitic distention of the abdomen, miliaria.

Some of these symptoms are found in *puerperal fever*, in the earlier stages, with soreness, shooting and stitching pains in the region of the peritoneum; the face is suffused with redness, glowing; slight chills followed by, or alternating with violent flashes of heat through the body; sensitiveness to pressure in the ovarian region; characteristic gastric disturbances.

Bryonia disturbs the sleep by exciting, annoying dreams about one's affairs; dreams full of quarrel; startings during sleep, visions of frightful scenes and objects crowding upon the fancy, while the body is hot and covered with sweat.

These symptoms show that in conditions of the system where

the vascular and nervous functions are powerfully irritated by disease, particularly in the various inflammatory fevers to which bryonia is homœopathic, this agent must often be capable of affording help.

Bryonia depresses the spirits, causes irritability of temper, vanishing of ideas, *delirious talk*, with desire to get away from bed, hurried speech; he fancies that he is among strangers and wants to get home.

These symptoms are not very important in themselves; but they may complete a group of phenomena such as may occur in various fevers, and other derangements for which bryonia has been recommended. An irritable temper, and a gloomy, hypochondriac depression of spirits, are eminently characteristic of bryonia.

HYDRASTIS POISONING.—A recent writer has called attention to the fact that hydrastis is quite rapidly eliminated from the body, providing the kidneys are in a healthy condition. In cases of chronic interstitial nephritis it may accumulate in the system. The symptoms of its accumulation are:—Headache, vertigo, blurred vision, nausea, constipation and convulsions.

ERYNGIUM AQUATICUM IN MEMBRANOUS LARYNGITIS.—Dr. B. B. Chakravanti, in *Homœopathic World*, reports a case that, from its symptoms, must have been a serious one. He terms it a case of membranous angina or bronchial croup. We are of the opinion that it would have been classified as diphtheria by most physicians. But *Eryngium aquaticum* 3x dilution cured the case within ten days. The symptoms upon which this remedy were selected are not as clear as we might wish them to be; and yet, the clinical observation is one of great interest as it shows that this remedy has a much wider field of usefulness than is generally given it. *Eryngium* is used principally in seminal and prostatic weakness. The case in point was a chubby boy, aged five years. A thick, dark colored membrane covered the larynx, there was a noisy cough, and respiration was much embarrassed. Fever, dry skin and restlessness, but no thirst. The boy could bear no pressure about the throat. The expectoration was very difficult, and was loosened after much hawking and was gray and tasteless. During sleep there was danger of suffocation. The observer speaks of œdema. Voice harsh and wheezing. Chest full of rales, said to be crepitant rales. The face of the child was livid, lips pale, and he was drowsy but could not sleep. At all events here was a most serious condition. The doctor reports continuous improvement after the administration of the remedy, and the clinical indications seem to be clear enough for future following in similar cases. Few physicians, in this country, would have omitted the antitoxin in such a case.

EDITORIAL.

THE MOSQUITO AS A CARRIER OF DISEASE.

Over two thousand years ago the theory was advanced that malarial fever was transmitted by mosquitoes. This idea was soon lost sight of, and until the beginning of the last decade the view generally accepted was that malaria resulted from night air and mists from swamps or pools.

In 1881 Dr. Charles P. Finlay reported a series of experiments carried out to prove that yellow fever was transmitted by mosquitoes. To Dr. A. Bignami (1894) is due the credit of definitely advancing the theory that the mosquito conveys the infection of malaria by inoculation. Since that time Prof. Grossi has been able to follow the entire life history of the malarial parasite from the time the blood of an infected person was sucked into the stomach of the mosquito, through its various stages of development in its new host, until the malarial parasites reached the salivary glands of the insect. It is now well known that filariasis is another disease which is transmitted by the mosquito.

The family of mosquitoes is divided into three genera: *aëdes*, *anopheles* and *culex*. There are four stages in the life of the mosquito, the egg, larva, pupa and imago or winged insect. The female lays the eggs on the surface of water or, rarely, on moist ground. These eggs hatch in from twelve to forty-eight hours. The larvae are dark in color and are easily recognized by their wiggling movements. They rest near the surface of the water and obtain air through a respiratory tube in the posterior portion of the body. The larval stage lasts at least six days and sometimes much longer. The pupae stage lasts from twenty-four hours to three days. At the end of that time the pupa bursts at the dorsal part and the fully developed imago rises from it. The duration of development from the ova to the winged insect is about two to three weeks for the *anopheles*. The males perish in the fall. The females hide in protected places during the winter, and in March and April lay their eggs in marshes or pools. Kersch-

baumer calculates the number of female progeny resulting from one hibernated anopheles female to be about thirty-one millions. Only the females possess a sting and they alone are to be considered in the transmission of disease. They take blood from many warm-blooded animals as well as from man.

The malarial parasites are disseminated, as far as is known at the present time, only by the anopheles. Mosquitoes are never born with the disease but must obtain it by sucking the blood of an infected person. The parasites have never been found in water, earth or air. In the body of the mosquito the malarial parasites undergo a sexual form of development, and when this is completed the parasites pass into the salivary glands of the mosquito. At the time of the next bite, while the insect is sucking up blood, it pours out the secretion of the salivary glands and with the saliva the parasites of malaria. It requires from seven to fourteen days from the time the mosquito ingests the infected blood until the insect is able to transmit malaria to a human being. The incubation period of malaria in a human being after being infected by a mosquito is from two to twenty-one days.

Yellow fever is transmitted by a different species of mosquito, the *Stegomyia fasciata*. The results of the investigation of the American Military Yellow Fever Commission in Cuba in 1900 and 1901, show that yellow fever is only contracted naturally by the bite of the mosquito. After the germ has been inoculated into a susceptible individual by an infected insect, it passes through a cycle of development lasting from three to thirteen days. Apart from this natural transmission of yellow fever by infected mosquitoes, the only proved method by which it is possible to transmit the disease consists in injecting non-immunes subcutaneously with yellow fever blood. Contact with a patient, clothing, excretions, etc., are incapable of producing yellow fever.

The practical results arising from this knowledge of the mosquito as a carrier of malaria and yellow fever, may well be termed one of the greatest triumphs of medical science. The work of the American Commission in stamping out these diseases in Havana is too well known to need comment.

In order to prevent the spread of either of these diseases it is essential that every patient should be isolated in mosquito-proof rooms. Every attempt must be made to prevent mosquitoes from biting an infected person, and then transmitting

the disease to healthy persons. After the removal of the infected person the room should be immediately fumigated, in order to kill any mosquitoes that may have gained access to it.

The most effective method of destroying mosquitoes in a room is by burning sulphur in the room after having closed all the doors and windows. A mixture of the dried stems and leaves of the *Datura Stramonium* with saltpeter if burnt in a room will effectually destroy the insects and will not bleach fabrics. Formalin is said to be ineffective against the hibernating forms. The aquatic forms of the mosquito develop in rain-water barrels, cisterns, pools, ditches and swamps. In order to destroy the insects all vessels containing water should be kept tightly covered and swamps and pools drained or filled in with earth. Wherever possible petroleum oil should be poured on the surface of the water in ponds, cisterns, etc. This forms a film on the water and destroys the larvae by preventing them from breathing. This method is of doubtful value in dealing with lakes or swamps and drainage is the more effective method.

The two principles to be carried out in attempting to eradicate malaria and yellow fever are: isolation of infected patients in mosquito-proof rooms, and destruction of mosquitoes and their breeding places.

THE RESTRICTION OF WATER AS A THERAPEUTIC MEASURE.

It has been the fashion among physicians during the last few years to advise patients suffering from almost every form of disease to drink copiously of water. It is true that the average person, in this country at least, does not drink sufficient water to fully meet the demands of the healthy organism, and the importance of copious water drinking in aiding elimination in a variety of pathological states associated with the accumulation of toxic substances in the organism cannot be too strongly emphasized. It must be remembered, however, that copious water drinking, like many other measures which result in much good if properly used, may also bring about disastrous results if irrationally or indiscriminately employed.

Restriction of the intake of fluids is as important a therapeutic measure in some cases as the free ingestion of water is in others. The investigations recently made by von Noorden

on this important and practical subject, clearly indicate the deleterious effects of large quantities of water on the stomach, the heart and the kidneys in certain pathological conditions of these organs.

In considering the possibilities of drink restriction as a therapeutic measure it is necessary to consider the effect which a diminution of the intake of liquids has on the organism. After very accurate and careful experiments, von Noorden found that a restriction of liquids inevitably brought about the following results:

1. The stomach is relieved of much work and the pressure upon its walls is reduced.
2. The total labor performed by the circulatory apparatus is decreased and the heart is spared.
3. The fluids of the body become more concentrated.
4. The body-weight is decreased as a result of the dehydration of the blood and tissue.
5. The appetite reduced.
6. The destruction of albumin is increased (only, however, if the restriction of water be carried very far).
7. The claim that water-restriction increases and accelerates the combustive processes going on in the organism, and, in particular, the destruction of fat, was not borne out by our experiments.

All of these effects, with the exception of the sixth mentioned, can be utilized for therapeutic purposes.

The effect of a diminution of the liquid ingested in lessening the pressure upon the walls of the stomach has been taken advantage of for several years in the treatment of dilatation of the stomach. As practically no water is absorbed from the stomach and as it consequently acts as a dead weight in the stomach when it cannot readily pass into the intestines, we can see how a dry diet spares this organ when dilated or when its muscle tone is weak.

The lessening of the work to be performed by the heart and blood-vessels resulting from a diminution of liquids is a most important fact from a therapeutic standpoint. As early as 1884 Oertel recognized the deleterious effects of copious water drinking in patients suffering from cardiac diseases, and propagated the theory that restriction of fluids signifies sparing the heart. Practical experience has confirmed the correctness of this view, despite the fact that laboratory examinations of

the quantity and quality of the blood show but little change in its composition. The deleterious effects of abundant water drinking on a weak heart, however, are not due to the accumulation of water in the cardio-vascular system, but to the forced transportation of large quantities of fluid through the blood stream, and to the diffusion of water into the tissues causing compression of the capillaries and increased resistance of the blood stream. Restriction of the intake of liquids, therefore, becomes an important prophylactic measure in cases of cardiac weakness, as well as an adjuvant to medicinal treatment after rupture of compensation has occurred.

Von Noorden believes, from clinical experience, that restriction of liquids is an important measure in the treatment of chronic contracted kidney prior to the uremic stage, and in acute nephritis. Examination of the excretion of urinary solids in chronic contracted kidney shows that they are not diminished even when the fluid ingested is reduced to one and a half pints daily. In the parenchymatous forms of nephritis, no beneficial results have followed a diminution of fluids.

The effect of a restriction of liquids in the treatment of obesity has been very carefully studied and it is quite certain that a diminution of fluid does not increase the intensity of the oxidation processes and the combustion of fat. Clinical experience shows, however, that many persons eat considerably less when not allowed to drink water freely. Cases of this character are often markedly benefitted by a reduction of fluids to one and a half pints daily. Such a measure is especially indicated in obese persons with co-existing cardiac weakness.

In closing this brief review of the sphere of drink restriction as a therapeutic measure, we wish to emphasize the fact that the routine advice to all patients to drink water freely is to be deprecated. Each case must be considered individually and the amount of fluid ingested should be increased or diminished according to the effects which we desire to obtain.

GLEANINGS.

STANDARDIZED GRUELS.—H. O. Chapin says that with the increased knowledge that has resulted from a careful study of the use of gruels in infant feeding it has become recognized that they have other values than as attenuants of the curd of cow's milk, being used in the effort to prepare food for assimilation and by taking advantage of this fact it is frequently possible to keep the body well nourished on a quantity of food much smaller than is theoretically indicated. It is highly desirable, therefore, that there should be some uniform standards for use in preparing gruels, and that their food values and possibilities should be better known. With this object in view the author had made gruels containing varying amounts of pearl barley, prepared barley flour, wheat flour, and rolled or flaked oats, which were then assayed to determine their composition in order to show the relative properties of tissue-building and heat and energy-producing elements. The tables obtained are reproduced as well as others showing simple methods of preparing gruels of any desired strength.—*Medical Record*, February 18, 1905.

WILLIAM F. BAKER, A. M., M. D.

FRESH COLD AIR TREATMENT OF PNEUMONIA IN INFANTS.—W. P. Northrop reports two cases of pneumonia in infants in which the windows of the sick room were kept open night and day; both children recovered. He believes it will become more and more the rule to treat pneumonia in this way. Cool, pure air, he says, reddens the blood, stimulates the heart, improves digestion, quiets restlessness, and aids in overcoming toxemia. He concluded with the following prescription for killing a baby with pneumonia: Crib in far corner of the room with canopy over it, steam kettle; gas stove (leaky tubing); room at 80 degrees F. Many gas jets burning. Friends in the room, also the pug dog. Chest tightly enveloped in waistcoat poultice. If the child's temperature is 105 degrees F. make a poultice thick, hot and tight. Blanket the windows, shut the doors. If these do not do it, give coal-tar antipyretics and wait.—*Medical Record*, February 18, 1905.

WILLIAM F. BAKER, A. M., M. D.

DUODENAL ULCER AND ITS TREATMENT.—D'Arcy Power states that the subject of duodenal ulcer has not yet received adequate attention, though its onset is severe and the sequelæ may be dangerous. It is usually thought to be of rare occurrence, but during the last few years the author has had the opportunity of operating about seven cases and observing some others. These cases grouped themselves sharply into two classes; those in which the cases perforated and those in which there was no perforation. The cases which perforated required immediate surgical treatment and were sutured with more or less success. Those which did not perforate

were either treated at once on account of hemorrhage or came for treatment many years afterward in consequence of duodenal narrowing due to cicatrization of the ulcer. The non-perforating cases were treated by retrocolic gastrojejunostomy. As all the cases were in males it may be presumed that this condition is more common in this sex than in females. After noting in detail the symptomatology of the two classes of cases the author fully considers the question of diagnosis and states that it should be easy to diagnosticate the cases where perforation has occurred, but in practice it is often found to be a matter of very great difficulty. The symptoms are not characteristic and so the diagnosis is often left in abeyance, in the hope that a few hours' delay will render the signs and symptoms more definite. Such advice is likely to prove fatal, for, instead of making the diagnosis clearer time only renders it more obscure. The slight clues which could be picked up shortly after the onset of making the diagnosis are soon masked by the peritonitis which follows. Delay not only allows the peritonitis time to develop, but it permits the extravasated contents of the alimentary canal to gain access to the innermost recesses of the peritoneum so that a subphrenic, pelvic, or iliac abscess may still further complicate a condition which is well-nigh desperate. A rapidly increasing pulse rate with acute abdominal pain and but slight objective symptoms is an indication for an exploratory operation. The diagnosis becomes even more obscure without operation, and the case may be mistaken for pneumonia, appendicitis, or peritonitis, due to causes other than intestinal perforation. The lesson to be learned from the cases that have perforated is to operate early. The perforation takes place without warning, and it thus occurs in persons who are otherwise in excellent health. Such persons bear an abdominal operation very well, and it is better to open an abdomen needlessly than wait until the symptoms of peritonitis make an operation imperative. The diagnosis of the non-perforated cases is even more difficult for the reason that there is no pathognomonic sign of non-perforating ulcer of the duodenum. After noting in detail the various symptoms the author reaches the following conclusions: (1) Duodenal ulcers are not very uncommon. (2) So far as he has seen them, duodenal ulcers are single and are more common in men than in women. (3) Duodenal ulcers may perforate and cause acute symptoms, or they may heal, and by cicatrization lead to symptoms of chronic duodenal obstruction. (4) The sequelæ of a healed ulcer may be so remote that the symptoms are mistaken for those due to cancer of the pylorus, and the patient is allowed to drift from bad to worse under the erroneous notion that he is to die. (5) There is no means of recognizing the existence of a duodenal ulcer in a great many cases until it perforates or the results of its cicatrization become manifest. (6) The treatment of duodenal ulcer consists (a) in the direct suture of a perforated ulcer, the prognosis being less favorable than in similar cases of perforation; (b) the performance of gastrojejunostomy in cases of dilated stomach due to duodenal constriction, the prognosis being the most favorable of all the conditions for which this operation is performed at the present time.—*British Medical Journal*, December 17, 1904.

WILLIAM F. BAKER, A. M., M. D.

THE INTRAVENOUS INJECTION OF ANTITOXIN IN DIPHTHERIA.—Biernacki and Muir state that they are familiar with the work of Cairns, who has claimed increased efficacy for this method and who has stated that there resulted a quick subsidence of the glandular enlargement, a strikingly rapid decline in the toxæmia, and in pneumonic cases a marked diminution of the restlessness. In fifty cases, twenty of which were treated by this method, there were only three deaths, a mortality of only six per cent. Of these seventeen were tracheotomy cases, with only one death, a mortality of only 5.8 per cent. The authors state that they tried the method in seven cases with five deaths in one series, and in another, in thirty-eight cases with three deaths.

After reporting these cases in detail they state in conclusion that in attempting to estimate the beneficial effects of antitoxin given intravenously these cases must be discounted in which a marked improvement follows intubation or tracheotomy, since this may be due mainly or entirely to relief of the obstruction. Nevertheless, it will be noted that of nine cases operated on early, only one died, and this must be regarded as a low mortality. Even in cases other than laryngeal, it would seem very difficult if not impossible to say of any individual patient that a better result was obtained than might have followed subcutaneous injection. However, there was a fatality of three in thirty-eight selected severe cases. This result seems to be a favor of the intravenous method. At the same time, although many of the cases treated were undoubtedly very severe, there has been a general fall in the fatality of diphtheria in this district, and this leaves room for inspection as to whether the subcutaneous method might not have yielded better results than in the past.—*Lancet*, December 24, 1904.

WILLIAM F. BAKER, A. M., M. D.

EPILEPTIFORM CONVULSIONS IN A CASE OF CHRONIC SUPPURATIVE MIDDLE EAR DISEASE; RECOVERY FOLLOWING MASTOID OPERATION AND LUMBAR PUNCTURE.—Huber presents the following case: The patient, a child aged two and a half years, had a history of adenoids and of fetid discharge, from the right ear, of two years' duration.

For a period of two weeks preceding examination the child had been restless, crying a great deal, and finally, shortly before the date of the examination, had a convulsive attack lasting from two to three minutes; these attacks were repeated, sometimes at half-hour intervals, occasionally accompanied by vomiting, and occurred impartially by day or by night, apparently without extraneous exciting cause.

On examination the child was apathetic, in a half comatose condition; the extremities were cold and cyanotic; there was convergent strabismus, slight horizontal nystagmus, dilated pupils, the right pupil especially; tache cerebrale; a pulse of 130, but regular; a temperature of 100 degrees and exaggerated reflexes.

In the right ear there was a large perforation of the drumhead, through which flowed a copious stream of offensive pus.

Passive movements excited general muscular contraction and a lumbar puncture was done, with the result of a cessation of this reaction.

The postural operation revealed a pus cavity with bulging dura, and, on two successive days after the operation, the lumbar puncture was repeated

and followed by a diminution and then disappearance of the general symptoms.

On the twenty-second day after the operation the child was apparently well and was discharged from treatment.—*Annals of Otology*, April, 1904.

WILLIAM F. BAKER, A. M., M. D.

A COMMON MISCONCEPTION OF ASTIGMATIC REFRACTION.—Suter calls attention to a misconception which we suppose almost every student of refraction has at some time held, and from which many never free themselves. The error is the more widespread from the fact that some textbooks actually teach it, and others do not make the matter as clear as it should be. The error is this: That in astigmatism the meridians have each a separate focus, which is situated upon the optic axis somewhere between the focus for the meridian of the least curvature and the focus for the meridian of greatest curvature. As a matter of fact there are but two foci upon the principal axis—one for the meridian of least curvature, and one for that of greatest curvature.

The focal lines are two lines perpendicular to the axis at each of the foci, anterior and posterior; the directions of the two lines are at right angles to each other, being parallel respectively to the principal meridian to which each belongs. A pencil of parallel rays refracted by an astigmatic surface is divided into two pencils, one of which is brought to a focus at a point in the anterior focal line, and the other at a point in the posterior focal line. Thus two rays impinging upon opposite extremities of an intermediate meridian, neither will ever meet the optic axis nor will the two rays meet each other, and, consequently there can be no focus for rays lying in this meridian.—*Annals of Ophthalmology*, January, 1905.

WILLIAM F. BAKER, A. M., M. D.

CONGENITAL WORD-BLINDNESS.—Hinshelwood, Glasgow, reports another case, making his fifth of this rare condition. The subject was a boy, aged twelve years, who had the greatest difficulty in learning to read. While he was unusually bright at figures and an average speller, he could rarely read by sight more than two or three consecutive words, but came to a standstill every second or third word, and was unable to proceed unless he were allowed to spell the word aloud, thus appealing to his auditory memory, or to spell it silently with his lips, thus appealing to his memory of speech movements. His refraction, visual acuity, and fundus were normal.

This defect appears to be due to a difficulty in acquiring and storing up in the brain the visual memories of words and letters. It may not extend beyond this visual group of images. The visual memories of numbers and musical notes may be quite normal. These facts are to be explained by the different groups of visual images being stored up in different, but probably contiguous, areas, most likely the angular gyrus of the left side. As defect of the gyri on both sides is rare, re-education can be accomplished with great perseverance. The obstacle is probably due to the fact that all the centers involved in speech are on the same side of the brain.—*Ophthalmoscope*, October, 1904.

WILLIAM F. BAKER, A. M., M. D.

RICHTER'S HERNIA.—Lowe reports four cases of this variety of strangulated hernia observed recently in the wards of St. Mary's Hospital. The diagnosis is not always easy, and for this reason it is constantly overlooked in its earlier stages. Consequently its mortality is high. It is not so rare as previously thought. There were several other cases in the wards of this hospital during the last year in addition to the four under the writer's care. Treves' paper (1886) still remains the best summary in connection with this condition. It occurs more frequently in women and in femoral hernia, and is found only in adults. The bowels may be opened during the whole process of strangulation or may act occasionally and will often respond to aperients.

The first and last of the cases illustrate two of the chief difficulties with regard to determining accurately the nature of these cases.

In connection with the first case, it is noted that in the previous September a similar attack was ascribed to inflammation of a crural gland, and in the earlier stages of the final attack the same diagnosis was made.

In the last cases there was no question as to the hernia, but six days after it became larger and more tense, the woman had none of the appearances of a case of strangulated hernia, and the condition might have been mistaken for an inflamed sac or an obstructed hernia. This emphasizes the necessity of cutting down on any hernia that has become suddenly larger and is irreducible.—*Lancet*, January 28, 1905.

WILLIAM F. BAKER, A. M., M. D.

A SECOND CASE OF CUTANEOUS ANTHRAX SUCCESSFULLY TREATED BY SCLAVO'S SERUM WITHOUT EXCISION.—Bowlby and Andrews report a case of a man, aged thirty years, a hair-dresser, who, on January 9th, bruised his forehead without breaking the skin. Four days afterward some watery fluid exuded and on the fifth day a small black slough appeared, and the neck became stiff. On the sixth day an enlarged gland appeared at the left angle of the jaw. His general health was scarcely impaired, and there was little pain. On admission to St. Bartholomew's Hospital, on the eighth day, the black spot was the size of a sixpence, and there was a ring of vesicles around it, but not much inflammation. The temperature was 99.6 degrees and the pulse 100. The fluid from the vesicles showed practically pure cultures of the anthrax bacillus. The sole treatment consisted of the injection under the skin on the day of admission of 30 c. c. of Sclavo's serum. No rise of temperature followed. Next day the pulse was 76, and there were no constitutional symptoms. There was less local discomfort, and the gland at the angle of the jaw had decreased in size. The œdema, however, had increased, in the following day had still further enlarged, but with no increase in the size of the slough and no fresh vesicles. The gland continued to diminish, and then the œdema until by January 21st it was all gone. Convalescence was uninterrupted and the slough separated January 31st, fourteen days after the administration of the serum.

The anthrax bacilli were abundant on the day of admission to the hospital. On the following day, nineteen hours after the injection of the serum, by precisely the same methods of examination, no anthrax bacilli could be found in the fluid from the vesicles. Later examinations were equally negative.

The increase of œdema after injecting Sclavo's serum was noted in the first case also. It is suggested that it is due to the liberation of an intracellular toxin from the disintegrated bodies of the bacilli, some of which were observed in the discharge from the vesicles.

These results seem to indicate that, at least, in moderately early cases of cutaneous anthrax, excision may safely be dispensed with where an initial dose of 40 c. c. of the serum is employed.—*British Medical Journal*, February 11, 1905.

WILLIAM F. BAKER, A. M., M. D.

INCONTINENCE OF FECES IN CHILDREN.—Three instances of this rather rare condition, of which only about a dozen cases are on record, are reported by M. Ostheimer as occurring in boys ranging from four and a half to ten years. In one case incontinence had followed diphtheria and scarlet fever and persisted for two years. In six months upon nutritious food, tonics, and fresh air, he made a complete recovery. The other boys were otherwise well, with the exception of a general nervousness in one of them. The latter after a time also developed paroxysms of pain with micturition, and often passed bloody urine. After removal of a vesical calculus, he became perfectly well. The author found the best results attended from the administration of strychnine and atropine, up to one-tenth of a grain each day. Relapses are common and must always be treated in the same manner. Tonics and good food, together with plenty of fresh air, are very important.—*University of Penna. Med. Bulletin*, February, 1905.

WILLIAM F. BAKER, A. M., M. D.

TUBERCULOSIS OF THE KIDNEY.—Howard A. Kelly states that three facts must be considered in making a diagnosis of renal tuberculosis: (1) Has the patient a tuberculosis of the urinary tract? (2) Is the disease still localized? (3) If the diseased kidney is removed, is the remaining kidney able to do the work?

A satisfactory diagnosis is made when tubercle bacilli are found in the urine at more than one examination and preferably by more than one observer and when these are traced upwards to one kidney and positively excluded from the other. In order to do this the urine as it is collected from the bladder must be examined; then the separated urines must be collected near their sources in the pelves of the kidneys.

In an advanced case the diagnosis is usually quite easy. The patient, often much emaciated and cachectic, has hectic fever, sweats, a rapid pulse, a furred tongue, and anorexia, with a more or less marked low haemoglobin. There is usually constant vesical tenesmus with the passage of urine loaded with pus and sometimes bloody. Palpation in the loin reveals a tumor on one side. The family history in a large percentage of cases points strongly to tuberculosis and evidences of the disease may be found in other parts of the body. On making a vaginal examination an enlarged cord-like ureter is felt through the anterior vaginal wall. If in a case presenting such earmarks tubercle bacilli are found in the urine, the diagnosis is assured and it only remains to determine further the condition of the bladder and of the opposite kidney by a cystoscopic examination.

The cases most difficult of diagnosis are the early ones in which the

bacilli are often sparse or appear in the urine only at considerable intervals. We are obliged here to depend upon repeated examinations of large quantities of urine (24 hours), allowed to stand, decanted, and then the sediment centrifugalized. In all obscure cases one of the first steps should be the collection of the urinary sediment and the injection of it into two guinea pigs, one into the peritoneal cavity and one under the skin of the axilla or groin. If there is tuberculosis, after three weeks the disease will have developed sufficiently to be recognized at the necropsy. The injection of tuberculin is valuable if, in addition to the fever induced, there is marked local reaction in the form of intense pain in the kidney. It is in these doubtful cases, too, that the inspection of the ureteral orifices plays such an important part; a tell-tale blush or puffiness or granular condition will often mark the diseased side. In case the diagnosis is not clear the physician can well afford to demand the important added element of time and observation, putting off any thought of operation while he keeps his eye on the patient from week to week, or perhaps from month to month.

The treatment consists in the extirpation of the disease in every case which will permit it. Conservatism has not done well here, as almost all tuberculous kidneys contain scattered foci of infection which cannot be seen before the complete removal of the organ from the body.

Nephrotomy, as a preliminary to a radical operation in desperate cases, is often a life saving measure, as it may enable the patient to pick up and stand a nephrectomy later. It is important in a nephrotomy to open up all the abscesses in both poles of the kidney. In advanced disease, when the kidney is much enlarged, it is best to empty it at once, reducing its size to a minimum, and then, after irrigating thoroughly, to proceed to the extraction. In the extirpation of the kidney in old suppurative cases, the intra capsular enucleation (Ollier) should be more extensively used. This is performed by thrusting the fingers through the dorsum of the kidney and then breaking through the kidney substance on all sides from within out as far as the tough capsule. By following this in every direction with one or two fingers the kidney is soon separated on all sides down to the vessels at the hilum, which are then tied.

One of the most serious local extensions of the disease is the involvement of the vesical walls and many surgeons have considered these cases beyond the pale of radical relief. But Kelly considers that with careful surgery almost no case is beyond radical relief so long as the disease remains confined to the urinary tract of one side and the bladder, and to this may be added a non-tubercular pyelitis of the opposite side.

The steps of the treatment in these cases are: (1) Drain a bad bladder thoroughly; (2) then remove the kidney and ureter; (3) use the bath when possible; (4) close the fistula; (5) treat any remaining small patches of the disease with nitrate of silver applied through the open air speculum; (6) use distention and irrigation treatments; and (7) excise any rebellious areas of the disease.—*The Lancet*, June 17, 1905.

J. D. ELLIOTT, M. D.

FRACTURE OF THE CARPAL SCAPHOID.—E. A. Codman and H. M. Chase report 18 cases of fracture of the carpal scaphoid and reach the following conclusions as to treatment:

1. Cases which have not been treated or which have been treated as sprains, by a short period of fixation followed by massage, electricity, active and passive motion, etc., seldom, if ever, have union of the fragments.

2. If the joint is kept fixed for a number of weeks immediately after the injury, union may occur, but the functional result is not perfect, although better than in cases of non-union.

3. It is too late to obtain union if fixation is not attempted within a few weeks after the injury.

4. Excision of the proximal half of the broken scaphoid promises a better ultimate result than any other form of treatment.

5. Since operation, nevertheless, is an undesirable risk, a reasonable attempt should be made to obtain union by fixation, if the case is seen soon after the injury.

6. Operation should not be delayed many months because secondary joint changes may occur and chronic arthritis result.

7. The advisability of operation in cases of long standing is doubtful and must be decided by the amount of disability present in each case.—*Annals of Surgery*, March, 1905.

J. D. ELLIOTT, M. D.

FRACTURES OF THE TARSAL BONES.—D. N. Eisendrath calls attention to the importance of an early diagnosis and the institution of the proper treatment of fractures of the tarsal bones.

He reports five cases of fractures of the os calcis and astragalus, and on account of the rarity of fractures of the other tarsal bones, confines his paper to the consideration of fractures of these two bones.

These fractures may be produced in several ways: (1) Compression fractures. These are the most frequent fractures, and occur by the patient falling from a height and striking upon the ground, so that the sole of the foot receives the major part of the weight of the body. The latter is transmitted to the astragalus and os calcis, which are wedged in between the bones of the leg and the surface struck, and are crushed or compressed and must break.

2. Fractures of the neck of the astragalus, following sudden dorsal flexion of the foot.

3. Fractures of both astragalus and calcaneus following forced supination or pronation of the foot.

4. Fractures of the os calcis which result from forcible action of the muscles of the calf.

5. Crushing fractures. In this variety the other tarsal bones are also involved. It follows such accidents as being run over, etc.

6. Gunshot fractures.

A diagnosis should be made upon the history, X-ray examination and the following symptoms:

1. Marked swelling of the ankle joint.

2. Obliteration of the normal depressions below and behind the malleoli.

3. Crepitus and abnormal mobility. These can rarely be elicited, and but little reliance should be placed upon them.

4. Dislocation of the fragments. Such a detached portion may be felt beneath the malleoli, or just above the tuberosity of the os calcis. If felt

and recognized to be a part of one of the tarsal bones, this sign is of the greatest value.

5. Lowering of the malleoli through diminution in thickness of the astragalus or os calcis.

6. Shortening of the foot when found is of great value.

7. Abnormal positions of the foot, such as pes valgus or pes varus, if fixed, are also of confirmatory value.

To sum up, the following are of the greatest value in making a diagnosis, palpation of a fragment, pes valgus or varus traumaticus, the X-ray examination, and the history of the case.

Treatment.—In simple fractures without displacement the foot should be immobilized at right angles, best of all in a removable cast, well padded around the ankle and heel. Massage should be begun on the third or fourth day. The cast should be worn for eight weeks, and the patient gradually permitted to place his weight upon his foot. Convalescence may be delayed, as in many cases of simple sprains, by the presence of a flat foot following the injury. The pain and discomfort caused by this condition can be quickly relieved by a suitable steel insole.

2. In simple fractures with displacement, if there is the least danger of secondary necrosis of the skin through a fragment impinging on it, it is best to convert the fracture into a compound one. If the fragment lies laterally, it can be easily removed. If it lies behind the ankle and is complicated by detachment of the tendo-achillis, the latter should be sutured to the body of the os calcis. If either the astragalus or os calcis are so badly splintered as to render their retention impossible, they may be removed without marked loss of function in the foot.

3. One should be guided by the same rules as apply elsewhere in the treatment of compound, crushing, and gunshot fractures of these bones.—*Annals of Surgery*, March, 1905.

J. D. ELLIOTT, M. D.

CASES UNDERLYING PROLONGED LOSS OF FUNCTION IN CERTAIN INJURIES ABOUT THE SHOULDER JOINT. PROGNOSIS—TREATMENT.—Many cases of injury about the shoulder joint are followed by prolonged disability and these cases resemble very closely those in infants who are the victims of obstetrical paralysis.

Alfred S. Taylor has made a series of dissections and experiments upon still-born infants to discover the etiology and gross pathology of these lesions. He found the paralysis resulted from overstretching of the nerve roots of the brachial plexus by displacing the head and neck too far laterally from the corresponding shoulder. There resulted rupture of nerve, traumatic neuritis and cicatricial contractions around the nerves. These lesions occur from above downward in the plexus and, clinically, this is true in injuries to adults. The cases in adults can be explained in the same way, as there is usually a history of a fall and the patient striking upon his shoulder and head simultaneously, thus forcing them apart and putting the brachial plexus upon the stretch.

This explanation does not apply to all injuries about the shoulder joint but only to those presenting the following symptom complex: (1) Pain which is constant, involves the shoulder region and is aggravated by motion,

either active or passive; (2) Loss of power which varies from moderate paresis to paralysis and involves definite muscles; (3) Atrophy of the muscles involved which is greater than can be accounted for by disuse.

The prognosis must never be too favorable, especially in patients over 40 years of age. Treatment should be based upon the following principles: (1) Immobilization of the extremities for three weeks to favor nerve repair, with the minimum amount of reaction; (2) counter irritation over the roots of the brachial plexus, followed by (3) massage, electricity, douches, etc., to the paralyzed muscles; and finally, in persistent paralysis, (4) exploration of the plexus and excision of damaged tissue followed by nerve suture.—*Medical News*, June 3, 1905.

J. D. ELLIOTT, M. D.

TREATMENT OF CONGENITAL CLUBFOOT.—In the treatment of clubfoot by modeling redressment, F. Muller points out the dangers of obstructing the circulation, *i. e.*, ischaemia paralysis, gangrene and decubitus.

The cast should be fit well, must be liberally padded and must not cling to the leg too tightly. The cast should be trimmed so that the knee joint and the dorsum of the toes are entirely free and fenestra may be cut in the cast to observe the condition of the skin of the sole of the foot. After one week the patient can be allowed up on crutches, and with proper care the cast can be worn for six to eight months. It is often necessary to tenotomize the tendo achilles or the extensor tendons. Tendon transplantation may shorten the period of convalescence in cases due to paralysis of a group of muscles. A suitable brace should be worn after the cast is removed; the length of time varying upon the case.—*Medical Standard*, February, 1905.

J. D. ELLIOTT, M. D.

OCCUPATION DISEASES OF THE EYE.—The author classifies occupation diseases of the eye under three headings:

1. Direct lesions from solid or gaseous substances; among these are conjunctivitis and blepharitis due to various trades, bad air, and inclement weather; the conjunctivitis in workers with tulip bulbs, foreign bodies in the cornea, as found among stone breakers, ring-form corneal opacity of bricklayers and steel grinders, the characteristic corneal opacity found among workers of nitro-naphthalin and aniline dyes, oyster shucker's keratitis, trophic keratitis in caisson workers, and cataract of glass blowers.

2. Indirect lesions as caused through the circulation. Under this heading is found the direct toxic injury to the optic nerve in general poisoning by carbonic acid gas, nitro, dinitro and amidobenzol, lead poisoning, etc. Workers in rubber and explosive factories, type setters, potters, Japaners, printers, etc., are those affected.

3. Neuropathic: Miner's nystagmus, watchmaker's orbicularis cramp, and cramp of the ocular muscles from exercise.—Victor Hauke, Wien. *Annals of Ophthalmology*.

WILLIAM SPENCER, M. D.

MYOPIA.—The author recommends during the school years full correction so long as the near point with the correction is normal for the age.

In general, progress and increase of the myopia are in this way retarded. Attention must also be given to the distance at which the near work is held (35-40 cm.). Re-examination should be made yearly, and any change corrected. The later myopia is corrected, and the higher it is, the less readily will constant full correction be borne. If the myopia in each eye is quite different in degree, the better eye, which is generally the one least myopic, is first fully corrected, and the second eye is as nearly fully corrected as is consistent with comfortable binocular vision. Frequently the second eye must be under-corrected. Myopic presbyopes are given glasses which will give them the same near point which presbyopic emmetropes require. Reduced visual acuity, dynamic muscle disturbance, etc., are of course treated according to the individual exigencies of the case.

In high myopia, with progressive changes in the posterior part of the eye, he has obtained good results from the sub-conjunctival injection of 2-4% salt solution.—Prof. Schwarz, Leipsig. *Annals of Ophthalmology*.

WILLIAM SPENCER, M. D.

AMBYOPIA EXANOPSIA AND ITS RELATION TO STRABISMUS.—Kehr examines the several theories relating to the subject, and divides the authors into three classes. The first class includes those who believe that the amblyopia follows and results from the strabismus (A. von Graef, Douders, Javal, Grunfeld). Those of the second class consider the amblyopia in part the cause and in part the result of the strabismus (Alfred Graef, Schweigger, Silex). Under the first and second class, the amblyopia can, by suitable treatment, be improved; under the third class it is incurable. Kehr believes that the strabismus is a result of the amblyopia, and that improvement in vision of the amblyopic eye is not possible. Many well studied cases are cited and arranged to demonstrate this. Fritz Kehr. *Annals of Ophthalmology*.

WILLIAM SPENCER, M. D.

THE CURE OF TRACHOMA WITH RADIUM.—The author used a crystal of radium bromid, weighing 1 mg. which cost twelve dollars. He placed it in a thin glass tube 3 cm. long and 3 m. m. in diameter and cemented it. With this he touched every granulation and follicle in three cases of trachoma and follicular catarrh. The treatment lasted 10-15 minutes every day, and granulations which had been previously treated unsuccessfully with the usual painful remedies, disappeared in a surprisingly short time.

Three cases were quickly and painlessly cured, but no certain conclusions can be drawn from such a small number.—H. Cohn. *Annals of Ophthalmology*.

WILLIAM SPENCER, M. D.

EUSEMIA.—Eusemia is a cocain-adrenalin mixture, consisting of cocain 1 per cent., adrenalin solution of the usual strength, chloreton and physiological salt solution. It has been extensively used in dental surgery by Rosenberg and Wohlaur, of Berlin, with very satisfactory results. Used in the form of injections up to 3 cc. m., anaesthesia was in most cases immediate, and in a few in about five minutes.

In this mixture cocain is effective in weaker solution than when used

alone; the diminished absorption caused by the adrenalin, renders the local anesthesia less toxic, but more profound and of longer duration.

Cohn has experimented with eusemia in a great many cases of eye disease. Good results were obtained in operation upon the lids and conjunctiva, such as the removal of lid cysts, cutaneous horns, conjunctival cysts, and chalazia. Particularly useful was it in excising chalazion. Injected slowly into the everted lid through the conjunctival surface, the operation was painless, there was no hemorrhage, and there were no unpleasant after effects. Paul Cohn, Berlin. *Annals of Ophthalmology*.

WILLIAM SPENCER, M. D.

OIL OF CLOVES FOR HAND STERILIZATION.—That the subject of hand sterilization has not been brought to a satisfactory stage of perfection is shown by the diversity of views relating to it, and by the constant attention which it still receives from careful investigators. Dr. J. C. Webster, in a recent article, advocates the use of impure oil of cloves, and claims for it a superiority over all methods heretofore employed. His method consists in scrubbing the hands for five minutes with any good soap and hot water, changing the latter frequently. The skin is then dried with a sterile towel, and rubbed for one minute with alcohol in order to remove any remaining moisture. When the hands are dry the oil of cloves is rubbed into the skin for five minutes, and afterwards washed off with alcohol. The disagreeable burning sensation does not cause any injury to result. This unpleasantness is usually more marked when the alcohol used is considerably below the absolute strength. The hands thus cleansed are thoroughly rubbed with sterilized talc powder and covered with smooth, dry rubber gloves which have been boiled for fifteen minutes. The clinical use of this method for a year has yielded him satisfactory results. Experimentally these results are confirmed by the investigations conducted by Rosnow at Dr. Webster's suggestion. From the tabulated results published, it appears that oil of cloves used in the manner above indicated possesses antiseptic properties far in advance of creolin and bichloride of mercury.

Extending these investigations to the sterilization of cat gut, Rosnow found that the crude gut as obtained from the market, could be properly prepared for surgical use by rolling convenient lengths into circles and dropping the gut into oil of cloves and allowing it to remain there for eight days; the excess of oil is then removed by placing the gut between two sterile towels, and afterwards leaving it in alcohol for six hours and drying between sterile towels, the gut is ready for use.—*Amer. Jr. Obs.*—*Vol.* 51-433.

THEODORE J. GRAMM, M. D.

GNOCOCCUS INFECTION IN CHILDREN.—*Holt* (New York) has recently considered this subject in a paper before the New York Academy of Medicine, and comes to the following conclusions:

1. We must recognize gonococcus vaginitis as a very frequent disease and one to be constantly reckoned with in institutions for children. It is also very frequent in dispensary and tenement practice and not uncommon in private practice of the better sort.

2. In its milder forms and in sporadic cases it is extremely annoying

because so intractable; in its severe form it may be dangerous to life through setting up an acute gonococcus pyæmia or infection of the serous membranes, and in its epidemic forms it is a veritable scourge in an institution.

3. The highly contagious character of gonococcus vaginitis makes it imperative that children suffering from it should not remain in the same wards or dormitories with other children. A similar danger, though less in degree, exists with the gonococcus ophthalmia and acute gonococcus arthritis or pyæmia.

4. It is practically impossible to prevent the spreading of the disease if infected children remain in the wards with others. They must either be excluded from the hospital, or if admitted, immediately quarantined.

5. Cases of gonococcus vaginitis can only be excluded from hospital wards by the systematic microscopic examination of a smear from the vaginal secretion of every child admitted. If a purulent vaginal discharge is present such examinations are imperative and should be made as much a matter of hospital routine as the taking of throat cultures in children with tonsillar exudates. In the absence of a bacteriological examination a purulent discharge in a young child may be assumed to be due to the gonococcus.

6. The quarantine to be effective must extend to nurses and attendants as well as to children. Furthermore, the napkins, bedding and other clothing of infected children must be washed separately from that of the rest of the house.

7. Where the gonococcus is found with no vaginal discharge or with a very slight discharge, children should also be quarantined, although it is impossible at present to say to what degree such cases may be dangerous in the ward. One of the greatest difficulties in connection with the gonococcus vaginitis arises from the prolonged quarantine rendered necessary from the fact that these cases are of very chronic character and very resistant to treatment.

8. The danger to nurses from accidental infection, especially in the eyes, is considerable. At the present time they are not sufficiently instructed.—*Amer. Jr. Obs.*—Vol. 51-551.

THEODORE J. GRAMM, M. D.

THE DIAGNOSTIC SIGNIFICANCE OF THE SACRO-UTERINE LIGAMENTS.—*Sellheim* (Freiburg) has made a comprehensive study of this subject. These ligaments arise from a spur on the posterior part of the uterus in the neighborhood of the internal os and pass outward and upward in a curved line to be inserted in the sides of the pelvis near the sacrum. The vaginal examination can give but little information concerning them, but if a rectal examination be made so that the finger passes above the sphincter tertius, much information is obtainable. Thus in pregnancy these ligaments are hypertrophied, while they are found in an atrophic condition after the climacterium; in inflammations of the colon they are found thickened, as also in fibroma of the uterus. In the presence of small adnexal tumors fixed high up in the pelvis, the ligaments may still be freely palpated. If such tumors are situated lower down, only a groove may be felt between the ligament and tumor, or if adhesions are abundant the ligament can

only be partly followed. Tension and pressure made by growths either within or without the peritoneal cavity will be readily recognized. Small, hard, movable nodules upon the peritoneal covering are indicative of tuberculosis. In malignant diseases of the uterus the ligaments are stiff, hard, and knotted. In circumscribed new growths within the broad ligaments so that the latter become distended, the sacro-uterine ligaments are no longer palpable. In uterine fibromata if the ligaments may be followed laterally, the tumor does not affect the cervix; whereas if the tumor is felt beneath the origin of these ligaments we have to deal with a cervical growth.—*Beiträge z. Geb. u. Gyn.*—Vol. 8-365.

THEODORE J. GRAMM, M. D.

THE FORMATION OF OVA IN CARCINOMA OF THE OVARY.—*Leipmann* says it is a well-known and important fact that the cells of malignant tumors may show a certain correspondence in form and function with the cells from which they originate. Thus a case is on record in which after extirpation of a malignant struma, tetany and cachexia set in which disappeared after the formation of a metastasis on the sternum and reappeared after the removal of the metastasis. The similarity of form is particularly noticeable in cases of destructive adenoma of the colon where well developed beaker cells with mucous contents are found, or in cases of malignant adenoma of the liver in which greenish, gall-like masses appear. Some authors have also described ovular formations in cancer of the ovary. A case of adeno-carcinoma of the ovary in which such formations were particularly well developed, gave the author an opportunity of adding something to this question. The case was that of a 38-year old woman, both of whose parents had died from cancer. She exhibited a progressive swelling of the lower abdomen causing much interference with breathing. At the operation a malignant tumor of the right ovary was found with involvement of the parietal peritoneum. The specimen was carefully examined microscopically and some slides obtained which showed appearances somewhat simulating ova. Close study of these and a critical examination of the slides and illustrations of other authors leads the author to the conclusion that all such appearances are the result of regressive metamorphosis, and by no means due to the formation of true ova.—*Zeitschr. f. Geb. u. Gyn.*—Vol. 52-248.

THEODORE J. GRAMM, M. D.

THE BLOOD DURING PREGNANCY.—*Zangmeister* has reviewed the results of recent physiological researches particularly in reference to questions relating to obstetrics. These depend mainly upon the results of physico-chemical analysis. The study of the comparative freezing point of fluids and conjointly also their osmotic pressure, has given valuable information on many points heretofore in dispute. It is not possible to make a satisfactory abstract of an article dealing with a subject of this character, and so but one point will be given here.

For years we were taught that the blood of the pregnant woman is hydræmic. Later, however, it was shown that at the end of pregnancy the increase of the watery portions of the blood is but slight, that the number of red corpuscles and the hæmoglobin is rather increased than diminished.

According to the analytical methods above referred to it has now been shown that the blood during pregnancy is composed as follows:

As compared with the blood in the non-pregnant, the white blood corpuscles are not increased. The number of red corpuscles and the amount of hæmoglobin are somewhat increased; from which it follows that the volume of red blood corpuscles is greater, while the plasma is less than usual. The serum is thinner in every respect, it contains less colloid, that is albuminoid, and less crystalloid substances, which latter fact manifests itself in the diminished reduction of the freezing point; among the latter substances, however, strangely enough the chlorides are somewhat increased in the plasma of the pregnant woman, so that substances other than chlorides are specially diminished. The freezing point of the blood and of the serum is the same, the diminished molecular concentration of the plasma, that is its diminished amount of contained crystalloid substances is consequently similar to the blood in its entirety, although the total amount of all solid constituents as determined by evaporation is higher in the blood of the pregnant; for the red corpuscles contain about 65 per cent. of water, but the plasma 90 per cent. The slight dilution of the plasma which occurs in pregnancy is therefore concealed when the entire blood is examined, because it contains more red blood corpuscles than usual, which are poorer in water. From this follows the important result for blood analyses in general, that the determination of water, by means of evaporation, of the entire blood, without simultaneous analysis of the plasma and the determination of the volume of plasma in consequence of the constant variation in the amount of red blood corpuscles, can furnish no solution of the degree of concentration of the blood. We have therefore at the end of pregnancy not so much to do with *hyperæmia*, as especially with *hydroplasma*.—*Samml. klin. Vorträge*, No. 379.

THEODORE J. GRAMM, M. D.

THE HISTOLOGICAL SIGNS OF BENIGN CHORIOEPITHELIOMA.—*v. Velits* reports the case of a woman who had a vesicular mole and four months after removal came under observation for uterine hemorrhage. Soft tumors were found in the uterus, on account of which the latter was extirpated. One year later the patient was still quite well. The author has compared his microscopic sections with those of other cases regarded as malignant but which though more or less incompletely operated made a recovery. From this *v. Velits* concludes that chorioepithelioma with its metastases may spontaneously heal. He shows that this spontaneous healing depends upon necrobiosis, and may be recognized histologically by the diminished vitality of the cells of Langhans as exhibited by few or absence of mitoses, and by the presence of wandering cells, which are numerous in proportion to the disappearance of the Langhans cells. The wandering cells indicate the disintegration of the syncytium and may be regarded as the results of degeneration of the chorionic epithelium. This article is an acceptable contribution to the subject of the healing of chorioepithelioma which is claiming general attention at present.—*Zeitschr. f. Geb. u. Gyn.*—*Vol.* 52-301.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

THE TREATMENT OF ACUTE OTITIS MEDIA.—Dr. Alton G. Warner, in *Hom. E., E. and T. Journal* for June, explains the proper treatment of this sometimes serious affection, in a way that will be interesting to general practitioners. He claims that the homœopathic remedy *does* relieve inflammation of the middle ear, and that the better the homœopathic prescription the less need there will be for surgical interference. In the presence of a purulent effusion, however, we must not wait for Nature and the internal remedy to evacuate it. We may give a fair outline of his treatment as follows:

The safe place for such a patient is in bed. In the earliest stages, inflate the ear with a Politzer Bag. Apply a hot water bag and douche the ear with a warm one per cent. carbolic solution. Evacuate the bowels and give a very light diet. A ten per cent. solution of carbolic acid in glycerine is both analgesic and disinfectant. It may be warmed and dropped into the canal for the relief of severe pain. Very severe pain, without bulging or other indications for incision of the drumhead, may be relieved by Magendie's solution, five drops plus one drop of tincture of aconite, dropped into the canal. If resolution is delayed or if bulging occurs, we should have the drumhead freely incised. We must not cease treatment until all discharges have ceased and the membrane has healed. Gentle irrigation with the carbolic or electrozone solution, followed by instillation of a saturated solution of boric acid in fifty per cent. alcohol, increased to ninety per cent. as the patient becomes tolerant of it. Then, after soreness has passed away, gentle inflation of the ear and the administration of the indicated constitutional remedy. There is one last point that our author makes that deserves especial consideration, we believe:—As a protection against subsequent attacks, keep the naso-pharynx clean and remove all adenoid tissue. No observant physician will deny that acute otitis media, frequently starts in a neglected obstructive naso-pharyngitis. Clean out the child's nose when it has an acute or sub-acute cold.

CLINICAL VARIETIES OF DIABETES MELLITUS.—Another of Dr. Clifford Mitchell's helpful papers appeared in June *Clinique*, in which are discussed the clinical varieties of diabetes mellitus. Temporary glycosuria occurs in acute infectious diseases, in nervous disturbances and after the administration of various drugs or toxic agents. We may assume that such a condi-

tion is neither a variety of diabetes nor a forerunner of that disease. On the other hand, we find temporary glycosuria occurring in persons otherwise in apparently good health after the ingestion of certain articles of food—sugar, glucose, cheap candies, bananas, champagne or beer. The patient who suffers in this way, is generally a corpulent man with a tendency to urate deposits in the urine. This morbid alimentary glycosuria, as it is termed, is regarded by the author as the mildest variety of diabetes mellitus, and possibly a forerunner of a well marked diabetic condition. The importance of the urinary examination in cases of corpulent individuals having urate deposits becomes at once apparent to us. If sugar reappears even in small amounts after excess in carbohydrates for a day or two, it is advisable to restrict the amount of starches and to exclude glucose from the dietary of such a case. Another clinical variety, that was formerly called “diabetes decipiens” occurs in those who showing marked evidences of neurasthenia, still do not pass much urine, nor show other evidences of diabetes. The urine may even be sub-normal in amount, yet it will persistently show one or two per cent. of sugar. Such patients may suffer from nervous breakdown, but even upon a mixed diet, they will not develop the ordinary diabetic phenomena. The author speaks of such a case and prescribed an out-of-door life with ordinary mixed diet. In marked contrast, may be mentioned a third class of cases, in whom, after an indulgence in *sweets*, well marked diabetic symptoms appear often with suddenness. Polyuria, thirst and loss of weight have followed hearty eating of buckwheat cakes and maple syrup. It is natural to suspect the pre-existence of a morbid alimentary glycosuria in such cases, but our author could not often obtain such a history owing to the fact that most physicians will persist in making their urinary examinations exclusively of the morning urine. Even in marked diabetes, the morning urine may be free from sugar—a point worth our notice. It is possible in this latter class to control the condition, if the patients will avoid indulgences in sweets or excess of starchy foods. In a *fourth* class of cases, we find a history of shock, strain or some emotional disturbance. A man has lost a fortune, or a woman has lost her child, and sugar appears in the urine from this time. It is quite interesting to note, that in the first three classes, it was possible to control the glycosuria by diet. In the fourth class, diet did not help. In all of these four classes, no diacetic acid reaction could be found, by the ferric chlorid test. Dr. Mitchell again insists upon the value of the ferric chlorid test in diabetes. This test is so simple that there can be no excuse for its neglect as a routine procedure in every case of this disease. No matter what the percentage of sugar, if the ferric chlorid reaction is persistently present, the case is a serious one. The truth of this fact was impressed upon us quite recently in the case of a woman aged fifty, who had suffered from glycosuria for some years. She had few diabetic symptoms, but a marked persistent ferric chlorid reaction. We prognosticated coma upon the strength of Dr. Mitchell’s reported experiences. It occurred within a week and proved almost immediately fatal, in spite of our efforts. The author reports one case, in which the wonderful effects of the Stern Egg-Yolk Treatment are clearly brought out. This is a new method of treating cases of diabetes which prove unmanageable upon ordinary dietary restrictions. Dr. Mitchell’s case was a severe one. The

patient showed marked symptoms. He could not distinguish a quarter from a nickle, so much had his vision failed. He was so weak that he could hardly walk. The ferric chlorid reaction was persistent and intense in both night and day urines. At the beginning of the trial, the weight was 128 pounds. This patient was put upon the various egg-yolk dishes, including celery soup and meat soup, so that during the next two weeks he averaged twelve egg yolks a day. He gained six pounds during this two weeks. Two months later this patient reported that he had gained eighteen pounds since beginning treatment and no ferric chlorid reaction could be found. The man improved so much that he was able to resume work. The sugar persisted. The point being that the egg-yolk diet removed those symptoms of unfavorable diagnostic import, improved weight, and lessened the symptoms. One very striking fact in connection with this remarkable case ought to be especially commented upon. The diet did not reduce the amount of sugar, but rather seemed to permit of an increase, yet it caused a disappearance of the acetone bodies and resulted in a great general improvement. In severe cases of diabetes, it is these acetone bodies that are responsible for the severe symptoms, and such cases demand different treatment from those very mild cases of diabetes in which sugar alone appears to be the cause of the clinical phenomena. Altogether Dr. Mitchell's article is one that demands study rather than mere reading. It is a step forward.

HOW TO BE YOUNG ALTHOUGH FIFTY.—There are very few of us, nearing the half-century mark, who are not conscious of, at least, some slight lessening of our capacity for work. It is not so easy to labor continuously, nor so pleasant to miss our regular sleep and meals, as it used to be. We do not feel so philanthropic after sundown, as we once did. There is a growing tendency to avoid confinement cases and charity calls. We feel hurt when asked to prepare a paper. We could do it of course, and do it better than ever; but, "what's the use?" These, and many other things, show the lessening of our ambition and our capacity or inclination for work. They are the precursors of old age. It is a very serious question, what to do for these symptoms. Some men recommend chloroform. Highballs are not so quick in their effects, but act in much the same manner. Golf has been thought to be palliative. The best remedy, however, is the Summer Vacation. Close up your shop, forget that you are a doctor, and go off to the woods and get close to Nature for awhile. When you return, you will be conscious of renewed youth and work will be a pleasure. The long vacation is the prophylactic against premature senility. It is the only one. If a man can secure a clear conscience and a regular summer vacation of one or two months, there is no reason why he should not be young, even although he is fifty.

MEDICAL DIVERGENCIES.—Dr. W. John Harris, President of the Missouri Institute of Homœopathy, responded to the toast, "Divergencies and Approachments in Medical Opinions and Beliefs," at the banquet of the General Assembly of Missouri. His response was dignified and probably gave the allopathic physicians some new thoughts. The doctor remarked that to the student of medical history it must readily appear that what are

classed as divergencies in medical thought, are often but the seeking for better methods by the brightest minds of our profession. The limitations and imperfections of therapeutic measures, have been the rock upon which many of our best men have tried to plant the lime light of investigation, only to be called, for their pains, the disturbers of the peace of the profession. Divergencies often turn out to be really approachments. To all must be allowed the liberty of thought. The hypothesis of to-day may be confirmed to-morrow. We are all striving to do our best with the light that is in us, but we must not try to alter facts to fit our beloved hypothesis of to-day nor our theories of yesterday. All the great divergencies of medical history had their origin in a gradual but ever increasing dissatisfaction with existing conditions, and an earnest desire to formulate something better. If there had been no divergencies, there could have been no progress, and if there is no progress, there can be no approachments; therefore if there is a truth to be told, let us honor the man who tells it so long and loud that he finally compels mankind to listen to it. Of the many divergencies that have occurred in medical practice, there is none, perhaps, that has produced so lasting an impression and practical effect, or which has created quite so much opposition as did the innovation proposed by Samuel Hahnemann. Let us tell our students all there is known in the science of medicine. Let us be guided by what science has proved to be true, let us have faith in each other, let us believe in the works of those who we know labor faithfully, honestly, for the well being of humanity and the uplifting of that science which we all love. When we diverge to-night, may it be to approach again on an occasion as auspicious as the present, may it be round a board where the light of brotherly love illumines our faces, where the memory of the good deeds of our brother practitioners fills our minds with the freshness of a never failing spring.—*Clinical Reporter.*

A POINT FOR OUR COLLEGES.—At a recent meeting of the Meissen Club, of New York, the speaker, Dr. Harvey King, expressed the opinion that the homœopathic school of the near future must be one that could put several experts into each chair of the school. He did not believe that a school having but one teacher—however good—in each chair, could produce as good results as the school which had a half dozen celebrities; as, for instance, in the surgical department:—If there were six prominent men, each with the very latest and best operations and teachings collated by him in his travels abroad each summer; and, his studies and practice each winter and spring and fall in his large practice, there could be no gainsaying this superiority. The same was true, and perhaps more so, in the materia medica chair. One man might have a very fine way of teaching his subject, Materia Medica or Therapeutics; yet the class will tire of his sameness and his personal idiosyncrasies. It would turn with relief and a renewal of interest to the other four or five teachers, and thus secure the best in the department. Then Dr. Frank Kraft volunteered the fact that materia medica and therapeutics were not taught with the proper enthusiasm and fire in the modern schools; that it mattered but little however good the teacher may be, if he does not impress his class with the feeling that he himself believes in and uses the materia medica, and is a

success with it. We understand that it is the custom of the Meissen Club to devote a portion of each meeting to the free discussion of problems relating to Homeopathy and her interests. It is a mighty good custom, by the way.

WHAT IS PSORA?—Dr. P. W. Shedd, in a recent conversation with an eminent surgeon, was asked the question:—"What in hell is psora, anyhow?" "What business has anyone, in this enlightened age, to use such a term?" Dr. Shedd was too much overcome by the forceful manner of his questioner to reply at the moment, but after he came to (and we congratulate him upon "coming to" after the operation) he prepared a very interesting little answer which is published in *American Physician*; and, which ought to give the eminent surgeon several new thoughts upon the subject of "scientific enlightenment." Psora is a *disease-syndrome*, whose etiology is unknown so is syphilis, measles, scarlatina, variola, acute epidemic miasms, chronic pandemic miasms. We found, by looking through half a dozen dictionaries, that a syndrome is the name given to the union of symptoms which takes place in diseases. Hahnemann having apparently recognized a disease-syndrome worthy of a name, christened it "Psora." The very name, at once, eliminates the *acarus scabei* as an etiologic factor. And psora is quite as good an appellation for a disease-syndrome as "small-pox." Man does not die of "little-pocks," does he? And may not little-pocks be produced by half-dozen different evanescent causes? Where is the scientific enlightenment about this, and yet it goes without comment. Dr. Shedd has also a carefully prepared list of symptoms, arranged in schema-form, from which anyone can get a clear idea of the symptoms and signs composing this particular syndrome, which accompanies his article in July *American Physician*.

STAPHISAGRIA IN SEMINAL WEAKNESS.—The drug, staphisagria, causes during its primary action, great sexual desire. In the secondary effect, or reaction of the organism, there follows indifference and total lack of sexual desire, both in the sexual organs and in the emotions. In its pathogenesis, we must notice the frequency of the seminal emissions, with or without dreams; on three and on five nights in succession. In the form of spermatorrhœa that is accompanied by a chronic inflammatory irritation of the prostatic portion of the urethra extending into the ejaculatory canals and seminal ducts, this remedy has long been recognized as most useful. Staphisagria has probably been found curative in many nasty cases of masturbation with seminal losses particularly where the trouble is a long standing one and the victim suffers from hypochondriasis, uneasiness about his health, queer notions that resemble delusions, chilliness, constipation and dyspepsia. Dr. John Murray Moore has been able to reduce seminal emissions to the normal frequency by means of this remedy. He considers the normal frequency to be about one in three weeks. But he does not think that the remedy will cure the vile habit of masturbation, nor the erotic dreams that accompany emissions. *Phosphoric acid* and *eryngium aquaticum* have given him better and more uniform results than has staphisagria.—*Journal of The British Society*.

REMEDIES FOR THE MALNUTRITION OF INFANTS.—Dr. C. H. Murphy, in *Medical Counselor*, after referring to the different methods of feeding

children suffering from the ill effects of an improper dietary combined with ileo-colitis and similar conditions, speaks of a few remedies which he has verified at the bedside. For the baby that cries all the time, seems ill, has a white, waxy and transparent skin, is losing flesh and seems a bundle of nerves, without indications of indigestion, he recommends very properly an entire change of food in addition to *Arsenicum album* 3x. For such a child the author would also recommend protonuclein, although he does not mention his reasons. For the baby that is flabbily fat, pot-bellied, sweating about the neck and back of head, so that its pillow is damp, having open fontanelles and a foul smelling diarrhoea; he suggests *Calcareo carbonica* 3x. This may seem a low preparation to some, but the remedy acts well even in a trituration as low as the 3x. If there are evidences of rachitis, the bones not well developed, emaciation and slow teething; *Calcareo phosphorica* 3x is the best remedy. When evidences of the tubercular diathesis are present, he gives *Tuberculinum* 30x, every third day. And if the breath is foul and the tongue is coated, he adds to the latter remedy, Creosote. Its action is described as a disinfectant of the stomach and intestines. The dose of the creosote is one-fourth to one-half drop in milk, three times daily. The loss of appetite, so commonly met with, is said to disappear under the creosote. Just here, the author recommends his favorite combination tablet, consisting of iodine 2x, creosote 2x and calcarea phos. 3x, given in milk. It is a strange fact, but if you will ask the average doctor for what he uses the various bottles of combination tablets, he has upon his shelves; he will reply: "They are not of much account, but I bought them." "I seldom use them." A species of hypnotism practiced upon doctors, by the modern salesman of pharmaceuticals is responsible. Very few of us who have not wasted some money upon follies.

FOREIGN LITERATURE.

CONDUCTED BY P. W. SHEDD, M. D.

New York City.

JAPAN.—Medical men recommend fresh air as conducive to our health and well-being. No one denies it, even among laymen, who has a bit of education or the least knowledge of sanitary principles. Nowadays Japan is an ideal nation in the eyes of the world. We mention here how the Japanese enjoy fresh air in their own homes. The Japanese believe in the efficacy of fresh air and plenty of it both day and night. They are not at all afraid of the night air and ridicule the American or the Indian idea that the night air is harmful. They believe that nature has provided for every hour of the day and night just the kind of air that is most beneficial. It may literally be said that the Japs really eat air. They go out in the morning just as the sun is coming up and take in great draughts of air. Their houses are so constructed that the air has free access to them day and night. Their dwelling places are mostly made of bamboo, the partitions are of paper and the windows consist of oiled paper.

In the coldest weather they live in these houses and if they feel chilled

they simply add more bed-clothing at night and more garments in the day time. They pay no attention to a draught. They will sit in the door-way on a chilly evening with a direct draught sweeping through the house. They never catch cold because they are accustomed to this sort of exposure. In the evening and in the early morning they often walk barefooted through the dewy grass. An air bath for the body, they consider one of the luxuries necessary for health. They will walk with little or no clothing on at night, entirely nude, under the trees near the open ground around the house. Their clothing, always loose and flowing, admits air currents to pass up and down the body in all sorts of weather. Although these people revel in the night air and have no fear of draughts, yet colds and pneumonia are little known among them. Physicians in Japan are not nearly so numerous as in the United States or the Continental countries of Europe.—*Indian Hom. Review.*

TWO IMPORTANT ANNOUNCEMENTS.—The well-known Prof. Behring, the discoverer of diphtheria antitoxic serum, has published recently in the *Deutsche Revue* an article on "Immunity," in which he repeatedly speaks of the homœotherapeutic principle, and recognizes the fact that the homœopathic principle applied in diphtheria, tetanus and other infections brings good results.

Another authority in "regular" medicine, Prof. Koch, of cholera and tuberculosis fame, in a recent Paris interview declared that *Tuberculinum in infinitesimal doses acted favorably in tubercular processes*, while the large doses did more harm than good.

These two declarations, from such eminent authorities, should be given wide circulation.

Prof. Behring compares in the matter of immunization the isotherapeutic and the homœotherapeutic principles. The first, he says, is a procedure of nature as shown by the fact that in most diseases, *e. g.*, variola, measles, typhus, cholera, etc., one attack gives immunity. As for the second or homœotherapeutic principle (*similia similibus curantur*) he remarks that it was brought into use by Hahnemann, employed by Jenner in vaccination, and exemplified in modern (old school) practice by Pasteur. Another application of it is seen in Koch's Tuberculinum.

Thus we find Behring cognizant of the law of similars, while Koch admits a second principle worked out in homœopathy, the minute dose.

So Truth crushed to earth rises again; the century-long struggle of homœopathy in defence and promulgation of natural law and science has not been fruitless; and S. Hahnemann, M. D., did not live in vain.—*Homœopatish Maandblad.*

SERUM-THERAPY IN SYPHILIS.—It is interesting to note that Dr. Malherbe (Paris) has been experimenting with the syphilitic serum of Roux, and after a series of cases he concludes: "After having cherished the illusion that repeated injections of an animal serum would have a favorable effect on the evolution of syphilis I have come to the conclusion that these injections, *under the conditions and in the dosage now employed* have no effect upon the disease." If Dr. Malherbe will investigate the homœopathic application of the toxin, Syphilinum, as worked out in the *materia medica* he may find it of some efficacy. He tends to the gross pseudo-potent dose.

It would seem that in these days of radium, X-rays, N-rays, Ni-Rays the dynamic powers of the sensorially inappreciable, infinitesimal, had been rendered sufficiently popular to attract even old-school minds. And then the indications, the indications, gentlemen, for the successful use of a remedy! "Get a proving!"—*Trans.—Le Progres Medical.*

ACROPAESTHESIA—NUMBNESS OF THE EXTREMITIES.—Case, a woman who began by feeling such a sensation of itching on the hands that it deprived her of sleep. She now has a finger anesthesia which prevents the recognition of objects by touch. These phenomena have lasted ten years, the general health remaining good. This acroparesthesia is frequently found in women between 30 and 60 years of age, apparently having no relation to the menopause, and doubtless due to an intoxication. The affection is further characterized by cramps and sensory disturbances attacking the feet, the hands, the shoulders or even the ears.

[Case in point, Miss A. G. aet 60, Tremulous oscillation of the head sidewise, (left cervical muscles) with numbness across the dorsa of the toes. Duration 10 years. Continuous right renal ache. Urinary examination showed it loaded with uric acid and calcium oxalate. General health, diet, habits excellent. Three tablets of Helonius 3x removed the kidney pain permanently (for the last seven months). Coccus 200, Apis 200, Lycopodium 200 at long intervals reduced the paresthesia and tremor to a minimum.—*Trans.*]—*Revista Homœopatica de Barcelona.*

CHLORIDISATION AND DECHLORIDISATION.—The importance of common salt in nutrition has long been recognized, being present in all tissues and especially in the fluids of the body (5 to 6 per 1,000 in the blood serum) and modifying the equilibrium by its osmotic action. Bunge found that elimination takes place in the form of sodium carbonate by means of the organic potash salts (tartrates, acetates, malates); thus herbivora whose regimen is rich in potash have a physiological need of salt.

Its pathogenic action may now be studied. When not eliminated, from any cause, it causes or favors renal, cardiac, hepatic dropsies, the phlegmasia alba dolens of typhoid, parturiency, and cachectic states. Cornet presents the most interesting facts of this new pathogenesis as follows: *Alimentary Chloridisation.* Vidal and Leimerre (1903) announced that in certain cases a retention of sodium chloride in the system, *i. e.*, a physio-pathologic chloridisation. Thus in two nephritic cases following the addition of 2 grams of salt to the regimen, there appeared subcutaneous, pulmonary and cerebral edema; on stopping the salt they ceased. In other (arterio-sclerotic) nephrites nothing untoward happened, but there was an enormous urinary excretion of sodium chloride. *I. e.*, in the first two cases, diffuse nephritis, the elimination was null, or but partial. Hence salt in the food may cause pathogenic effects in certain cases where because of a disordered system or insufficient eliminative power, sodium chloride is retained.

Alimentary Dechloridisation.—It is therefore essential in case of edema that the system be impoverished of sodium chloride, be it dietically, diuretically or dermally. The value of a milk diet, of food prepared without salt (potatoes, meat, butter, etc. Widal) is thus made apparent.—*Revista Homœopatica de Barcelona.*

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DIET IN CHRONIC BRIGHT'S DISEASE.

BY GEO. M. DILLOW, A. M., M. D.

(Read before Amer. Instit. of Homœopathy, June, 1905.)

WHEN your chairman kindly asked me to furnish a paper upon the subject of Diet in Chronic Bright's Disease, I accepted the invitation with hesitancy because I felt that I had no personal contribution to knowledge to offer. But the subject is of great practical importance and, though apparently settled into traditional lines of procedure, it seemed that it might be desirable to review and bring out opinion upon points undergoing question by modern authorities.

Before proceeding to inquire into them let us understand what we would comprise under the term Chronic Bright's Disease, a name which some would restrict to one or another form of chronic Nephritis, and which many declare should be altogether abandoned because it is supposed to cover a number of diseases following different clinical courses, presenting varying symptomatologies, showing at post-mortem kidneys widely separated in their gross appearances, and believed to be pathologically distinct in their histological nature, origin and development. However multiform, whether the kidneys are large or small, soft or hard, red or white, granular or smooth, whether the processes start originally in the blood vessels, tubal epithelia, or the intertubal structure, there is one ultimate feature which constitutes the essential fact of all inflammatory diseases of the kidney, whether called paren-

chymatous, diffuse, croupous, exudative, tubal, catarrhal, interstitial, or what not—this is the destruction of the distinctive elements of the kidney, of its *sine qua non* for functionating purposes; of its glomerulo-tubal system. And this ultimate fact, with its clinical resultant of final suppression of the urine, represents Bright's Disease to ordinary comprehension.

Pathological theories which determine nomenclature may be serviceable for schematic grouping and description, but they do not satisfactorily cover the field of the disease. The purely parenchymatous nephritis of Bartels, with a comparatively rapid course, excessive dropsy, non-hypertrophied heart, oliguria and urine copious in albumin, casts and desquamated epithelia, represented post-mortem by a large white, soft, fatty kidney, is the rarest type actually met in practice. The majority of cases, classed as parenchymatous, are in reality cases of diffuse nephritis, which run a variable course, generally longer in duration, with a symptom-complex resembling and combining more or less the clinical features of purely parenchymatous nephritis on the one hand and of interstitial nephritis on the other, and presenting kidneys highly various in aspect, texture and size. Most common of all is the so-called interstitial nephritis, perhaps histologically in its purest form and primitive essence most genuinely parenchymatous, insidious in evolution and running through a prolonged course of progressive partly-part atrophy which results in the classical contracted kidney. These are types between which there are all sorts of intermediate individual phases, so that classification of the particular case in practice often taxes one's ingenuity in nomenclature. Appreciation of the hopelessness of a properly distinctive and inclusive classification on the pathological side, and the correlation of such classification with the clinical phases, has led modern authorities to group nephritis under the heads of acute, sub-chronic and chronic, taking the contracted kidney as the chief type of the latter. Such at least will best serve the convenience of our paper; and our glance at the subject of classification has been with the intent of suggesting that no principles of diet can be derived from pathological nomenclature. Such names are of comparatively little clinical value, especially in matters of diet. For the prescription of diet is something more than a label on a case, with a corresponding leaflet in perhaps some booklet exploiting a proprietary food. It must be adapted individually, while following lines of prin-

ciples more or less modified as the case is acute, sub-chronic or chronic.

But even these terms substantially help us little. The practical diagnosis is something more. How intense is the inflammatory process? How extensively is it distributed throughout the cortical area? How much of healthy renal tissue remains upon which to rely for elimination? How rapidly progressive is the outlook of evolution? Is it of the slow or rapid continuous type, or of the type that moves forward, with more or less remissions, by repeating recurrences of acute invasions in new areas of healthy renal tissue? What is the state of the heart and the vascular system, and their efficiency in maintaining an adequate equilibrium between heart and kidneys? Is the case of the edematous type, and is the œdema renal, or cardiac, or mixed cardiac and renal? Is it of the malignant uræmic type where, in spite of an appearance of fair elimination by the kidneys, some unknown toxic element defies all diet and treatment? What are the tendencies to special complications? What the attending and underlying degenerations? What the etiological factors, determining and modifying? These and other questions constitute the clinical diagnosis and enter into the management of the individual case, by hygiene, diet and medicine. They underlie that understanding of the case in hand which gives mastery of the physician over his problem of adapting general rules for individual application, so far as mastery may be possible. Necessarily it will be impossible for us to deal with our subject on this individual basis, and if our suggestions on diet may be found to be too general, we must plead the extreme difficulty of dealing adequately with one of the most highly complex problems in medicine.

In a general way what may be outlined as principles in diet? *First*, the etiological, the removal of the primary cause; *second*, avoidance of foods which by disturbance of digestion and of metabolism in general, and in themselves, produce end-products which tend to irritation of inflamed organs; *third*, sparing the kidneys unnecessary work in eliminating a superfluity of normal constituents; *fourth*, maintaining the nutrition and power of the heart upon which the circulation in the kidneys depends; *fifth*, maintaining good general nutrition.

As we have said, these principles obtain throughout the realm of renal inflammations, but they apply in different degrees: most stringent in acute nephritis, to a lesser extent in sub-

chronic forms, least rigidly in the chronic phases, especially of the contracted kidney in its periods of adequate elimination. Unfortunately the *etiological* indication is generally beyond our ken: it has either ceased before the case comes under observation or it escapes detection. In the large white kidney of Bartels, where profuse protracted suppuration, (syphilitic, tubercular, necrotic, cancerous), is often the primary cause, the diet should be as liberal as elimination within uræmic limits can possibly permit. Here there is the tendency to fatty and amyloid degeneration, and to death by marasmus and exhaustion; and the diet for the cachexia outweighs in importance the renal indication, formidable though it may be.

In the large kidneys of diffuse nephritis the etiology is various and obscure. Some are continuations of acute nephritis; many others acute and sub-acute inflammations grafted on a basis of the contracting kidney.

In the contracting kidney, uricæmia, overfeeding in proteids and free alcoholic indulgence are the best known causes. Auto-intoxications not well defined, but probably due to end- or by-products of imperfect digestion and gastro-intestinal fermentations, are presumable factors. In some cases we get a clue to albuminoid decomposition through the test for indican in the urine, and treatment addressed to the better digestion of meat, with restriction of excess in the albumin ingested, has sometimes a notable effect in improving or delaying the progress of the case. But indicanuria is not very common in the contracted kidney during its earlier and middle periods, and the causal indications for the autointoxications in general are met by the dietary to be considered in detail, as it mainly applies in the contracted kidney.

The first article of diet is *water*. Here we are met by the current belief that the more fluid the patient can be induced to imbibe the better for his kidneys. It is assumed that by as much as we can increase the volume of urine by so much we more freely promote the elimination of solids. The copious passage of water through the system is thought also to have the double advantage of washing out the accumulating end-products of metabolism from the tissues in general, and flushing the tubules of obstructing débris of inflammation. Moreover, by diluting the urine we can generally lower the percentage of albumin. In acute nephritis, is not convalescence ushered in by freer flow of urine, and does it not merge into an exces-

sive volume, œdema disappearing, albumin diminishing, solids increasing? In chronic diffuse nephritis, as the intenser inflammation subsides into the milder phase and the kidneys begin to shrink and the heart to hypertrophy, do not the same phenomena appear, although distributed far more gradually over a much greater length of time? In the contracted kidney do not small volumes of urine coincide with acute recurrences and dangerous toxæmia, large volumes with quiescent periods of comparative health and freedom from uræmia? Therefore ought we not to argue that fluid must be pushed, in the diet of Bright's Disease?

But so stated such an invariable rule is oftentimes harmful. It is not necessarily true that large volume and better excretion of solids always go together. A decrease in the percentage of albumin may, through greater increase in the volume of urine, mean an actual increase in the total excreted. When the kidneys refuse to respond to increased drinking, the retained water further congests an inflamed organ and adds to the general burden: it increases dropsy and by enlarging the volume of the blood it puts greater labor on the heart; and in Bright's Disease the heart needs sparing and conservation as much as the kidneys. Especially in the contracted kidney, there is no feature more important in treatment than to maintain good cardiac compensation, and failure of this compensation may be directly traceable to excessive fluid diet injudiciously prolonged. It is to Van Norden that we owe this contribution; that regulation of amounts of fluid, at times restriction of water, is as valuable in renal diseases as it is in valvular diseases of the heart. The regulation of the supply of fluid, according to Van Norden, should follow the following rules:

(1) In the stage of scanty or suppressed urine of acute nephritis, and of the acute phases of sub-chronic and chronic nephritis, the supply should be limited, when the kidneys refuse to excrete it, as shown by no increase in the volume of urine, increasing œdema, weaker heart, impeded respiration, nausea and vomiting. Here the amounts of water and food should be reduced to the smallest quantity. To relieve thirst ice should be sucked, and water taken by the tablespoonful. Instead of forcing rebellious kidneys to eliminate water by pushing the water supply, the skin should be made to relieve the dropsy through sweating induced by the electric light, or other hot baths.

(2) In cases of moderate reduction of urine with œdema, restrict the quantity of fluid to about three pints, largely in the form of milk, unless the kidneys should show a tendency to excrete water freely, when it may be given abundantly. Here again sweating is to be promoted. It will be seen that the rule is to follow the lead of the kidneys rather than to force them.

(3) In cases which show free diuresis water may be given freely according to the response of the kidneys to its ingestion, particularly in hot, dry climates. This rule applies especially to the convalescent stages of acute nephritis, and to sub-chronic nephritis in ordinary course with free and responsive elimination of water.

(4) In the contracted kidney, established stage, the patient craves fluid, and passes water freely, oftentimes too freely. But here there is the problem of dealing with high arterial tension, brittle vessels, hypertrophied and overacting heart, prone to dilatation and failure of compensation. Prolonged overfilling of the vascular system with water overtaxes the heart by increasing the blood pressure, and ultimately damages it, while it induces to rupture of blood vessels. By regulating the volume of the blood the heart labor may be lessened; and in order to husband cardiac power, Van Norden restricts the quantity of ingested fluids even when the heart is perfectly strong. He allows a limit of not more than three pints of fluid per day, the aim being to give a daily total of from forty to fifty ounces of urine. He furthermore claims that this limitation does not impair the elimination of urinary constituents; but to guard against such a contingency he permits free drinking one day in the week, and advises a two weeks' drinking-cure once in two or three months up to two or three quarts of fluid per day. But he warns against such water bouts whenever there is appreciable dilatation of the heart. During periods of cardiac dilatation and failure, it is needless to say that he is more rigorous in the restriction of fluids, and claims remarkable immediate benefit and permanent improvement. His experience has proven that the restriction treatment applies equally well in gouty forms and the uric acid diathesis, where he has seen no ill results in provoking gouty attacks and deposits of tophi.

While these claims of Van Norden, departing widely from the prevalent custom of directing patients to drink as freely as they can be forced, are still *sub judice*, we are convinced

that they justly represent a sensible protest against the indiscriminate use and abuse of fluid in nephritis. Long ago we observed that the stereotyped fluid diet in excess not only tended to weaken the heart but to increase albuminuria, without promoting better elimination of the solid constituents of the urine. Generally speaking, we have found patients to do better when the volume of urine has averaged in the neighborhood of $\text{f}\overline{3}50\text{-}60$ per diem, provided at the same time the total solids have been as well excreted as with larger volumes, which has generally been the case. There are times, however, when the larger volumes of urine are desirable; and these times have been found to be at periods following a diminution of total volume below three pints, with lessened solids, where the cause has appeared to lie in weakened action of the heart, and acute recurrences of renal inflammation on a chronic base. And here we have found too that following the cue of the kidneys is wiser than driving them.

Taking up now the question of foods proper, the first cardinal principle is the selection and distribution of the various kinds of food in order to secure the best digestion and provide against auto-intoxications. Idiosyncrasies of patients should be respected as against any theoretical dietary, even in desperate conditions. In acute nephritis, we have been sometimes astonished by the unexpected progress shown by patients who could take no milk proper, or the malted and cereal milks; only Valentine's beef juice perhaps with a little bread.

Next to the digestive indication, comes the question of what in food is likely to irritate the kidney or weaken the heart. This involves exclusion or reduction to a minimum of the ordinary condiments, pepper, paprika, curry, spices in general, garlic, celery, mustard, ginger, radishes, perhaps asparagus, which Van Norden believes has a more evil reputation than it deserves. Alcoholic beverages of all kinds should be forbidden, for alcohol is the best known irritant of the kidneys and most injurious to the walls of the heart and arteries. Coffee, tea and tobacco are harmful because of their irritating and debilitating effect upon the heart, whose good condition we will say again furnishes the key to the longer life in chronic nephritis. In cases where there is individual tolerance these may be allowed in minimal indulgences, but as soon as the point of tolerance has passed, as shown by greater frequency of pulse and increased cardiac impact, coffee, tea and particularly tobacco should be absolutely abstained from.

The further line of indication is the determination of what foods will furnish the least of the normal constituents most difficult of excretion:

Most difficult of excretion are creatinin derived from the creatin in meat extracts and broths: the pigments, deviations of hæmoglobin: the phosphates present in meat, eggs, milk and vegetables: urea and the inorganic sulphates derived from the metabolism of proteids: hippuric acid produced by synthesis of glyocol and benzoic acid from green vegetables, and particularly cranberries:

Easy of excretion are ammonia, acetic and citric acid, uric acid and the alloxuric bases, derived mainly from sweet-breads, liver, spleen, kidneys and strong meat broths; and especially the chlorides.

This list would therefore call for the exclusion of the meat soups, extracts and broths, and although uric acid is placed in the easy excretion class, its known toxic effects upon the organism require that it should be reduced to a minimum by abstention from all meats of visceral origin. Hippuric acid not known to be a special toxic, although difficult of elimination, is present in such minor quantities in the urine, that aside from avoidance of cranberries, other fruits may be taken freely and the ordinary green vegetables as well. Their slight disadvantage to the kidneys is more than counterbalanced by their good effects in other directions. The really serious problem in diet is how to deal with foods of the proteid class, milk, eggs and meat.

Milk has been the main reliance in the customary dietary of nephritis; but it is not ideal. In addition to its tendency to disorder digestion, especially when taken abundantly with other foods, it furnishes an excess of fluid and of phosphates, and is too rich in proteid for prolonged exclusive use. The objection to its excess of phosphates Van Norden claims can be removed by adding a little of the powder of carbonate of lime to each glass-full, the lime salt carrying off the phosphates through the intestine by formation of the insoluble salt of lime. Its excess of fluid and of proteid can be obviated only by a reduction of the total quantity. Twenty-four ounces, or three ordinary glasses, is sufficient in the mixed diet, this amount representing 26 grammes of albumin out of a total of about 100 grammes of albumin, which Van Norden's experiments show to represent the normal daily consumption of proteid in

the average of patients with contracted kidneys, in a good state of nutrition. If to the 26 grammes of albumin in a pint and a half of milk, we add 13 grammes of albumin in the form of two eggs, and 20 grammes of albumin in vegetables and cereal food, permitted *ad libitum*, there remains about forty grammes of albumin to be taken in the form of meat. Roughly speaking, this amount of albumin is represented by from 5 to 10 ounces of meat weighed raw, (five to eight ounces in women, seven to ten ounces in men).

Thus the proteid diet in contracted kidney necessary to keep the patient in good strength and nutrition is represented by the average of three glasses of milk, two eggs, and about one-half pound of meat per diem.

But should the *meat* be only white meat, the traditional prescription whenever meat is permitted in nephritis? As in many other traditions, it is difficult to verify the exact premises upon which this tradition is based; but the objection to the dark meat can be traced mainly to the supposition that dark meat is richer in uric acid, and specially in the extractions. But the analyses of Offer and Rosenquist found the nitrogenous extractives sometimes more abundant in dark meat, sometimes in white meat. Greater differences were found in animals of the same class than in the average amount relatively contained in classes of white and dark meat; and poultry and hare were found to be richer in extractives on an average than beef. Moreover, Kaufman and Mohr in a large number of experiments, found that in one series white meats gave better results in the elimination of urinary substances, and dark meats in another series, equivalent amounts of each having been ingested. Pick, in another set of experiments, found that the intensity of albuminuria bears no relation to the form of proteid eaten. And these facts, vouched for by Van Norden, sustained confidently by his clinical experience, teach us that the rule of white meat must be given up. It is not now a question whether the meat should be white or dark, but how much of either at pleasure should be allowed. This we have already outlined at about one-half a pound per day.

Relief from the old rule is likewise a relief to our common sense. In the contracted kidney, whose course is so long, with its prolonged period of good or fair general health where patients are generally under their own management in the main, Van Norden justly remarks that the white meat rule has done

an extraordinary amount of harm. Patients either eat too freely of it, or in time develop such an aversion to it that they reduce the consumption of all meat to a minimum; and being restricted generally on eggs and finding milk in large quantities to disagree, they are liable to lapse into a diet insufficient in proteid nourishment. If we spare the heart the overwork of propelling an undue surplus of fluid, it is equally important to sufficiently nourish the heart muscle; and, as elimination by the kidneys is largely dependent upon the proper circulation of the blood through the organ, a dietary arranged with a view to the amplest possible choice of food, which will both lighten the labor of the kidney and conserve cardiac structure and power, is essential not only to delay the progressive destruction of the functioning elements of renal tissue, but also to provide against those recurring periods of dilatation of the heart which so often prematurely put an end to our patients' lives, by the secondary induction of anæmia, œdema, pulmonary congestion, cardiac failure, and extension of the inflammation in the renal structure.

Our conclusions then as to the diet in the contracted kidney are that it should consist of milk, eggs, cereal, vegetables, fruit, sugar, fat, and meat: the daily allowance of total fluid should be about three pints: of milk three glasses: of eggs two: of meat dark and white one-half pound: of vegetables, fruits, cereals, sugar and fat, generally permitted at pleasure, but regulated according to individual peculiarities, the aim being to secure the best digestion with adequate but not overplus nutrition. Obesity is always a menace especially upon the side of the heart; and if the patient is too fat or is gaining too much weight, the carbohydrates, especially sugar, should be diminished gradually to four-fifths the former amount ingested, and if this should not be effective, to three-fifths. The rules that apply to reduction of weight in diseases of the heart apply equally here.

The articles of food to be abstained from are soups and meat extracts and teas: irritating vegetables such as radishes and perhaps asparagus, cranberries: highly seasoned dishes, meats made up with mushrooms, truffles, etc. (the delightful entrées of the French chefs), meats that have been long hung or canned, all viscera: alcoholic beverages of every kind; and coffee, tea and tobacco.

This represents the diet of contracted kidney in the early

and middle periods, with hypertrophied heart in full compensation, the patient in good general health and nutrition, with adequate excretion of solids. In periods of acute recurrences with threatened uræmia and œdema, according to the degree of exigency, the diet should be modified to that obtaining in the different grades and stages of acute nephritis; during uræmic periods, with oliguria or anuria, perhaps not more than a pint of milk per day, until the flow of urine begins to re-establish, when milk may be increased to three pints. If more food be needed, Van Norden thinks it is better to add cream up to 12 ounces rather than to increase the milk, and permit a little cereal food and sugar. For a sample menu, he gives milk f550, cream f512½, rice 31 2-3, zweiback 31 2-3, butter 31 2-3, sugar 32-3, which combined are equal in calories (2900) to 4½ to 5½ quarts of milk, an amount considerably more than is needed to nourish the average adult.

When the stage of free polyuria arrives, the amount of milk may be pushed to about 2½ quarts, representing about 80 grammes of proteid, 100 grammes being the maximum of proteid permitted. The remaining 20 grammes can be made up by a little bread, cereal, egg, meat, red or white, and pure sterilized unfermented grape juice, of which he speaks warmly as excellent to promote movements of the bowels and diuresis.

In making up a special diet list we can calculate about one gramme of proteid per ounce for milk, 6½ grammes per egg, and about 5 grammes per ounce of meat weighed raw. As the condition subsides into the ordinary course the diet is made to approach that outlined for the patient in good nutrition with adequate excretion of solids.

In the class of cases denominated chronic parenchymatous, croupous or diffuse, or more generally speaking, the sub-acute or more properly the sub-chronic forms, it is difficult to lay out a specific dietary inasmuch as cases vary widely. Accordingly as they approach the acuter types with œdema, or the more chronic types without œdema, the diet should be arranged upon the principles already outlined.

In the terminal stage of all forms, the object can be only to meet the indications without regard to theories in diet. The patients eat so little that it makes little difference what kind of food is taken. They are cachetic and asthenic, and the problem is to give enough food to sustain life. Permitting such food as the patient craves and can digest, preference being given to

such as is most nourishing, like beef juice, raw scraped meat, etc., is kind and sensible.

We have so far said little of the special criteria, especially urinary, which should guide our judgment in estimating the effect of a given diet. It is too large a subject to undertake within the limitations of this paper. But we can say briefly that the state of the patient in general is a better index than reliance upon any single indication. The relative sense of well-being, the energy felt, the endurance, the good performance of the several bodily functions, the absence of uræmic symptoms, the state of the heart and arterial tension, the greater or less freedom from œdema, are fully as important or perhaps more important than the urinary indications. Of urinary indications we place the chief in the total volume of urine per diem, in connection with the estimate of the total solids: next the total amount of urea excreted, taking care, however, to take into account the amount of proteid ingested, and not to argue retention of urea necessarily because it falls below the standard of average nutrition; last of all should be placed the relative total amounts of albumin in the 24 hours. No reliance can be placed upon relative percentages of albumin in samples of urine of single voidings at different times of night and day, for albuminuria often fluctuates according to conditions of rest, posture, exercise, amount and times of meals, and also according to varying degrees of general blood-pressure and varying states of the renal circulation, and perhaps relative composition of the blood. Pathologically, the amount of albumin represents the amount of active glomerular involvement and perhaps tubal denudation existing at any given time, the quantity filtered being regulated by the amount of blood pressure and rapidity of the blood current: the lower the pressure and slower the current, the greater the osmosis of albumin: the higher the pressure and swifter the current, the less. We cannot therefore argue too closely from varying fluctuations of albuminuria; and it is a fallacy always to conclude that, because the amount of albumin increases, there is necessarily a more intense degree of the inflammatory process and a more extensive invasion into renal tissue hitherto uninvolved. But if the urine lessens, the solids decrease, urea diminishes, casts, especially of the hyaline order, renal epithelia and leucocytes, are found in notably greater numbers, with perhaps the appearance of red blood corpuscles, associated increase of albumin in-

dicates increase of the nephritis, and probably calls for a change in the dietary. Otherwise minor fluctuations of albumin alone can be practically disregarded in an estimate of the effects of diet, especially temporarily immediately after a change; for the effect of change from one diet to another, of whatever kind, is apt to show an increase of albumin for a few days.

Can the busy practitioner follow up these urinary indications? If the urine is collected and measured an estimate of the total solids, urea and albumin is the work of but a few moments. Anything less than this is likely to mislead; and, if the patient objects to the trouble it is because he has not been properly instructed by his doctor as to the need of approximately accurate standards of judgment. He lives on a slumbering volcano, but he has the control of eruptions largely in his own hands, and the prospect of prolonging life in comparative comfort and usefulness. Does adequate uranalysis depress the patient? Not if the doctor keeps the findings in detail to himself, and gives his estimate of the general result so far as he may deem it wise. But in so despondent a disease, nothing is more disturbing to the doctor, nothing more pathetic, than the patient who keeps balancing his fate upon the rise and fall of the items in frequent uranalyses.

In conclusion, we would say that while Van Norden's views may not be accepted unreservedly, we have placed them before the Institute because we believe that he represents best among modern authorities large clinical experience combined with laboratory experiment. If they depart too widely from the traditional point of view, they are well defined on lines of their own and are capable of judicious application. We certainly need more rational principles to guide us in differentiating and individualizing diet in nephritis; and it is our conviction that in the gist of dietetic recommendations which we have endeavored to present, lies the path to a better understanding of the dietetic management of the large class of unfortunates afflicted with Bright's Disease.

THE MANAGEMENT OF MALNUTRITION AND MARASMUS IN INFANTS.

BY C. SIGMUND RAUE, M. D., CLINICAL PROFESSOR OF PEDIATRICS, HAHNEMANN MEDICAL COLLEGE, PHILADELPHIA.

(Read before the American Institute of Homœopathy, June, 1905.)

THE extreme form of malnutrition in infancy leading to actual starvation is more often seen in hospitals and dispensaries than in private practice. Aside however from this appalling athrepsia, or marasmus, there is a large class of infants in whom the nutrition is simply below par, but whose condition tends to become progressively worse unless active measures are taken to restore the balance of the physiological process of normal growth.

The pathogenesis of infantile athrepsia is as obscure to-day as it was in 1877 when Parrot described the condition as an independent disease following in the wake of gastro-intestinal disturbances and due to certain changes in the blood through which a reversal of the process of nutrition is effected and such pathologic processes as aphthæ, cutaneous eruptions, fatty infiltration of the liver and uric acid infarcts of the kidneys are produced.

The histological findings in the gut are by no means uniform. Baginsky insists that the mucosa is thinner than normal and that there is distinct evidence of atrophy of the intestinal tubules and villi. Heubner, on the other hand, claims that pathological changes are not constantly found and when so, that they are only the evidence of a preceding enteritis.

On the other hand, the long-continued distention of the gut with gas as a result of fermentation accompanied by the wasting of its muscular coat produces the appearance of glandular atrophy. The careful investigations of Holt substantiate the view that there is no definite gross pathological lesion in the intestinal mucous membrane to account for the clinical manifestations.

The theory of a chronic acid intoxication of intestinal origin was advanced by Keller, who found the urine highly acid and containing an excess of ammonia. The origin of these acids lies in a deficient oxidation of the carbohydrates and particularly the fats of the ingested food. The fact, however, remains that this excessive elimination of ammonia has been

found wanting in a number of cases of gastro-intestinal atrophy and has been repeatedly found in the absence of any distinct signs of wasting. In a number of my own cases the urine has been excessive in quantity and of very low specific gravity. The only abnormal chemical change noted was an increase in indican.

Arguing from the established fact that the intestinal mucosa of a marantic infant assimilates the proteids and fats of an artificial food much less satisfactorily than breast milk and consequently expends a much greater amount of glandular energy in this attempt, Heubner explains the failing nutrition on the grounds of a disturbed balance of energy, in other words, waste of energy on the part of the organism.

My personal investigation of the gastric contents of cases of marasmus (HAHNEMANNIAN MONTHLY, May, 1903) has shown that in a well developed case there is a total absence of free HCL. and that the amount of free hydrochloric acid in less pronounced cases bears a definite relationship to the prognosis. Indeed, where the emaciation is the result of some other disease, such as tuberculosis, I found more or less free acid, while in genuine marasmus it was absent. I recall a case of marked wasting as a result of ileocolitis seen with Prof. Bartlett. We found the HCL. but slightly reduced and a good prognosis was given. The child promptly recovered under careful dieting.

The etiology of marasmus is not always clear. In some infants there is undoubtedly a congenital feebleness of constitution which renders them incapable of conquering in the struggle for existence. Here heredity is an important factor, and we may find evidence of constitutional disease in the parents; on the other hand, they may be perfectly healthy. Extreme youth of the mother, and frequent pregnancy at short intervals is often noted on the maternal side of the history. The surroundings play an important role. Crowded quarters and lack of fresh air and sunshine are strong contributing factors. The ordinary hospital ward is a most undesirable quarter for infants convalescing from an acute illness and unless promptly removed therefrom they soon show signs of failing nutrition. Some believe that infection of one infant from another, possibly through contaminated food, may take place, although there is no proof that specific bacteria play a part in the etiology.

The infant may be delicate at birth, have difficulty in digesting its food even when breast fed, and its progress follow a

weight curve that is marked by progressive loss of weight interrupted by periods of temporary gain or standstill. More frequently the infant appears normal at birth and progresses perhaps as well as the average case up to from the third to sixth month, when as the result of some acute illness or what is more common, a change in the food, the nutrition gradually goes wrong. It is by no means necessary that the infant have been on breast milk and that a change to artificial feeding be instituted in order to bring about this condition. A sudden change to an ill-selected diet or the more gradual ill-effects from a diet that is unsuitable or insufficiently nourishing will accomplish the same results, especially when the environment is such as to favor marasmus. The emaciation progresses until the infant is reduced literally to skin and bones. The face has an old, wrinkled appearance, the eyes being sunken and the small triangular chin showing in marked contrast to the large head; the chest is small and the ribs are plainly visible while the abdomen is large and distended. Through the thin abdominal wall the stomach and coils of dilated intestines can often be seen. The skin is pale and transparent. There is more or less intertrigo about the genitals and buttox and a few scattered boils are not uncommon. Amenias are marked. The child presents the picture of distress and restless anxiety.

On account of the adynamia these infants are inclined to develop œdematous swelling of the face and extremities, which comes and goes. A temporary gain in weight may result from this œdema. The urine is normal under these circumstances. The temperature runs a subnormal course. An occasional rise to 99° or 100° in the rectum occurs when acute indigestion intervenes, but this is only transitory. I have seen it running between 96° and 97° F. in the morning (rectal) for weeks with ultimate recovery.

The stools vary in character. To all appearances they may be normal, excepting for an increased acidity. They tend to vary from day to day in number, color and consistency. Usually they are large and contain light colored curds with greenish mucus. Alternate constipation and diarrhœa is frequently seen.

The appetite is variable. Sometimes for a considerable period it is voracious and the child does not seem to get satisfied. Then again, it may be lost and there may be difficulty in inducing the infant to take sufficient nourishment. On account of the

weak digestion and fermentation, colic is frequent and considerably complicates matters.

The duration is difficult to foretell. The child may die suddenly from an intercurrent diarrhœa or broncho-pneumonia; gradual and persistent improvement may follow proper treatment or the case may drag on with exacerbations and ameliorations far into the second year. The prognosis is always grave but it depends much upon the care the child can receive. Thousands of cases that die annually could be saved if they could be removed to more favorable surroundings and receive more skilful and conscientious nursing. It is marvelous what persistent watching and self-sacrifice on the part of mother or nurse will accomplish in some cases with apparently the least hopeful outlook.

The differentiation between marasmus and tuberculosis is not always easy. It is said that the tuberculous infant is bright in appearance and not so prostrated and apathetic as the marantic infant, but this is not a reliable sign. In tuberculosis we have continued fever as a more or less constant symptom; at any rate, there will be distinct febrile movements at some time or other during the course of this disease. Besides, careful examination of the chest will reveal evidence of tuberculosis and we may also detect enlarged mesenteric glands by palpation of the abdomen. Persistent diarrhœa with pus in the stools and at times blood speaks strongly for tuberculosis.

Malnutrition is a much commoner condition than marasmus. It may be the result of prematurity or inherited feebleness of constitution, or follow after some acute illness, notably a gastro-intestinal affection. Again, malnutrition is a prominent symptom in tuberculosis, syphilis and severe rickets.

Its most usual cause is improper feeding and unhygienic surroundings. As to the last named factors, they are just as likely to be encountered in well-to-do families as among the poorer classes, for here proprietary foods and close, overheated nurseries come into play. In older children anæmia and malnutrition often dates back to an attack of one of the infectious diseases or results from improper eating and school hygiene. The diagnosis of simple malnutrition rests upon the exclusion of an organic disease or infection of which it might be only symptomatic.

Treatment.—In speaking of the treatment of malnutrition and marasmus it is impossible to go into the details of every

part of the subject in this limited paper. I shall confine myself to the elucidation of certain general principles and basic facts that have impressed themselves upon me in my dealings with these cases.

The regular weekly weighing of the infant is an absolute necessity and the only accurate guide by which we can judge of the progress of the case. In this connection I am a firm believer in taking the evening and morning temperature regularly, as this will indicate to us whether or not we must resort to artificial heat or extra clothing; also whether the infant must be kept in bed or taken out in the fresh air. With a persistently subnormal rectal temperature I have found it best to keep the child in bed, extra well clothed and a hot water bag at the feet. Such children should not be bathed but gently washed and then rubbed with warm sweet oil. Very young infants who are too much exhausted by dressing and undressing can be wrapped in raw cotton.

Of the highest importance is the *diet*. If the infant be breast fed we must determine by examination of the milk whether it be sufficient in amount and of proper chemical composition. If the milk be at fault and appropriate treatment applied to the mother does not improve the same, we must try a wet nurse. If the milk is simply deficient in quantity, mixed feeding should be instituted.

As it is not always possible to obtain a wet nurse, let us bear in mind that in modifying the milk for a delicate or marantic infant it must be of a strength that would be suitable for a much younger infant than the one in question.

It is generally held that the proteids are the elements of the food that cause all the trouble in feeble digestion and there has been a tendency to cut them down to almost nothing while the fats are administered liberally. This is the mode of practice that my clinical experience has taught me to be erroneous. Some years ago I learned that infants who could not take milk, even when highly diluted, could take it in fairly strong proportions if all the fat were removed. This is not true in every case, but there is a large class of infants who digest fat less satisfactorily than proteids, and *vice versa*. Some time ago a colleague told me of a case under his care, an apparently healthy infant of eight months, that would not gain weight, although the milk seemed to be properly modified. There were some signs of gastric indigestion and I advised him to

take the cream out of the food entirely. A month later he told me that the child began to gain immediately, but every time he tried to go back to the cream, the gain ceased. Holt has recently reported several cases in which serious toxic symptoms resulted from giving too much cream—the usual reason for giving so much fat being to overcome constipation. Edsall reported similar but less acute disturbances in older children, and here he demonstrated the presence of the lower fatty acids in the urine.

The element of the food that is most easily assimilated and that is most required in these cases to maintain the body heat and keep the machinery going is the sugar, or carbohydrate. That is why condensed milk, which contains a low fat and proteid percentage and a high carbohydrate percentage often agrees after the physician has racked his brains in the attempt to find a suitable milk formula. It is eminently better, however, to apply this principle in modifying the milk than to have the infant put on such an inferior article. The importance of pushing the carbohydrates was recently impressed upon me in a particularly trying case, where, on account of the colic and great distention of the abdomen, I had cut down the sugar together with the other elements of the food. At the suggestion of Dr. J. N. Mitchell, who saw the case with me, I returned to even a higher percentage of sugar than the child had previously received, and was rewarded by marked general improvement in the case.

Milk sugar is preferable to cane sugar for several reasons. In the first place, it is more easily assimilated, and can be given in larger quantities. Secondly, it does not so readily undergo fermentation in the intestinal tract, but when there is a tendency to diarrhœa it may aggravate this condition. Cane sugar and even starch should not be depended upon as a food in early infancy, while cane sugar may produce untoward effects in certain infants, such as gastric irritability, vomiting and colic. I have recently seen a case in which every attempt to substitute granulated sugar for lactose was followed by vomiting.

The chief function of starch in early infancy is to render the casein of the milk more easy of digestion. This is purely a mechanical effect. For this purpose we dilute the milk with barley-water. When milk is not borne well it is a good plan to

interpolate several bottles of mutton-broth made with rice or barley in the feeding schedule.

I have not had happy results from the predigestion of starch solutions with malt diastase. On the other hand, dextrinized starch is well borne in many instances. Baked flour, or a water-cracker rolled into a powder and then boiled with sufficient water to make a thin pap and a little milk and sugar added is well borne by infants of a year or older.

For the class of infants who do not digest the proteids of milk well, Edsall has suggested bean flour, on account of its high proteid percentage. He used it in a number of marantic cases in a solution that was subsequently dextrinized, and reports good results. Dr. S. W. Sappington experimented with this food at the Children's Homœopathic Hospital, but his results were not encouraging. The use of peptonized milk does not give the results expected of it. It is not so much faulty digestion as faulty assimilation that really lies at the bottom of the trouble. The good results obtained from peptogenic milk powder are due more to the milk sugar and bicarbonate of soda it contains than to the pancreatic extract.

Stimulation is at times called for. A few drops of brandy, well diluted, given during periods of great depression, has seemed helpful in my experience.

On account of the anemia, freshly prepared beef juice should be given in small quantities daily (3ss to 3j). Diarrhea would temporarily contraindicate its use. We know that even human milk contains insufficient iron to supply the requirements of the organism after a certain period, as has been pointed out by Bunge, and that the infant actually draws from the store of iron present in its tissues at birth to sustain the hemoglobin percentage of the blood. Consequently anæmia develops if milk is continued as the sole food beyond a certain time, and more markedly in subnormal than in normal infants. Instead of giving the usual quantity of food, it may be necessary to use a smaller amount at shorter intervals before the digestive tract will tolerate even a weak milk mixture. This, like every other question with the cases, must be ascertained by trial and experimentation.

The question of the use of alkalies in the food often arises. When there is vomiting of curds or the passage of curds in the stools, sodium bicarbonate should be added to the milk in small quantities, (2 to 3 grs. to the bottle). This will prevent the

formation of the tough curds of paracasein chloride and allow the more delicate curds of casein to enter the intestinal tract where they will be digested by the pancreatic juice. If there are loose, acid stools and much gas, lime water is preferable. I have occasionally seen beneficial results from the administration of a few drops of dilute hydrochloric acid in water, half an hour after nursing, where there was a deficiency of the gastric secretion.

The bicarbonate of soda, aside from its action upon the casein, also appears to exert some influence over the acid intoxication that plays so important a role in many of these cases.

Orange juice, on account of its beneficial effects in rickets and scurvy, may be used with advantage, especially when there is constipation and when the infant has been taking sterilized milk for some time. When the stools become highly acid and irritating the carbohydrate must be cut down and proteids (egg albumin, meat broth) increased, while in offensive and alkaline stools the carbohydrates must be increased and proteids cut down.

In looking over the list of remedies recommended in depraved states of nutrition, the deep acting constitutional ones stand in the foreground. Much benefit is derived, however, from paying attention to the acute symptoms as they arise and prescribing such remedies as *nux vomica*, *podophyllum*, *china*, etc., intercurrently.

The calcareas seem indicated in the majority of cases, especially *calc. phos.* *Iodine* is strongly related to emaciation and glandular atrophy, and the *iodides* are often indicated, especially the *iodide of arsenic*, when there is great prostration, nervous irritability and restlessness; tendency to diarrhoea; dropsical swelling of the face and extremities.

Sulphur has many of the symptoms of marasmus, and it especially suits the cases with cutaneous eruptions; intertrigo; irritating stools and urine. *Mercurius* naturally suggests itself where there is a suspicion of syphilis.

Lycopodium and *natr. mur.* are important in malnutrition and emaciation, and will suggest themselves by their characteristic symptoms.

**GONORRHŒA; SOME CONCLUSIONS BASED ON RECENT OBSERVATIONS;
THE GONOCOCCUS A MINOR ITEM IN ITS ERADICATION; FOUND
IN FISTULÆ, HEART, ANKLE, ETC.**

BY H. OTTO SOMMER, M. D., WASHINGTON, D. C.

GONORRHOEAL affections should rarely be looked upon as such pure and simple. Only too often is the bacteriological condition that of "mixed infection," a variety of bacilli being present.

Bockhart has clearly shown by inoculation in the urethra of a dying tabes patient that from a pure culture of the gonococcus a true gonorrhœa can be propagated. Etymologically speaking gonorrhœa necessarily must contain gonococci, *i. e.* in bacteriological nomenclature. Virchow said the only sure sign of tuberculosis is the tuberculosis bacillus, but nobody knew better than Virchow that this was merely speaking in the code of bacteriological nomenclature, and that the only real proof of tuberculosis was the verification of the tubercle, and that a few stray tubercle bacilli are a common enough occurrence in the respiratory apparatus of people, who never really succumb to tuberculosis. In my experience the virulent streptococcus, and his cousin the milder Staphylococcus are only too often present, and even the *tubercle* bacillus is by no means as rare in small numbers in affections of the *male* and *female genitalia* as our friend who does not look for it because of its rarity would have us believe.

We take it for granted that no one will accuse us of not being able to differentiate the "tubercle bacilli" from the smegma and syphilis bacilli, etc.

We have lately been finding the tubercle bacillus only too often in the throats of children, whose fathers have died of tuberculosis pulmonorum, and who are sufferers from so-called recurrent attacks of croup, whose mothers have been mildly affected pulmonarily, etc., only to find later on the tubercle bacillus in the vaginal gonorrhœa.

The *gonococcus* we have been finding in our practice in so-called mild ocular spring catarrh where only our suspicious skepticism has led us to search for him, and where the patient never had a real gonorrhœal ophthalmia from a clinical standpoint. The patient's oculist had used eye drops every spring and was "making good money" fitting glasses, but he was not

cynic enough to suspect the "Venereal darling," and the nitrate of silver in my hands ended the matter.

Nowadays, that we look upon *gonorrhœal endocarditis* as an established fact we must look for our enemy, the coffee-bean bacterium as a systemic disturber more than ever. When we were a young interne in charge of the Thompson-Cornell-Carleton service at the Metropolitan, N. Y., we found the gonococcus on more than one occasion in fluid aspirated from the *ankle joint*, thus clearly verifying Neisser's and Halsted's claims. Lately we are finding the *gonococcus* in pus discharging from *perineal abscesses* and *fistulæ*, and we notice in the literature that other colleagues have made similar observations. In the fistula cases we are usually finding the prostate large, soft, and boggy, the patients robust,—void of the beneficent quality of acute sensation,—without the Beneficence of Pain our friend Rufus Choate delights to describe it or their physicians have failed to impress on them the necessity of complete eradication, or having done so have failed to meet with co-operation on part of patient. They often have families of clean children on whom Crede's method was even never remotely called for, and yet the dormant infection has lain hidden. They have been to the hydropath, and to the homœopath, and have even had palliative minor surgery performed, but the last sad trace of prostatic infection has never been exterminated by expression and massage, and deep instillations.

In such cases we are getting beneficent effects from hand-syringe injection of Picratol (Wyeth) which seems to stir up a quiescent prostatitis and is especially indicated in chronic cases which have been "washed out" with permanganate of potash and in which there has long since failed to appear any prostatic, or urethral discharge, or even the merest morning drop of spontaneous origin, but which as soon as a little Picratol is injected will exude a most abundant thick discharge. Picratol hydrostatic irrigation is also useful. The Picratol must be used in very weak solutions, or it will be too painful and may cause *urethral bleeding*. It is particularly indicated in chronic gonorrhœa so that the well known anti-scar tissue benefits of the picric acid may be attained and strictures prevented. It has a markedly penetrant action, and a urethra smaller and distinct from periurethral infiltration will quickly subside. The bougies, or pencils of Picratol are, because of their convenience, much liked by traveling men, and to a certain ex-

tent are a clever little substitute for the Otis-Fowler bulbous bougies. However as they must be kept cool to prevent agglutination, a weak solution of Picratol dispensed to the traveling patient in a Big Four Syringe Bottle is more practical. In all cases, especially in the acute stage, that ill-defined term—the “diathesis of the patient”—must be considered when selecting the local medicament.

Every gonorrhœa in a syphilitic constitution is more difficult to cure, and I do not mean by that an immediate syphilis, but it may be only a slight hereditary taint, and as to that it is but reasonable to suppose that a large portion of humanity was to some extent syphilized. If our patient is a potash patient he will react at certain periods of his gonorrhœa better to Pot. permang., and if in addition the flow is yellow and profuse it will be more especially indicated for bacteriological reasons. If he is a mercury patient, corrosive sublimate will be more likely indicated.

The symptomatology of acute prostatitis and prostato-epididino-orchitis resulting from virulent injection, or too strong injections responds as well as ever to our late lamented and never to be forgotten Farrington's indications, and I have experienced the most beautiful responses to *Pulsatilla* as an agent to bring out suppressed discharges.

Urotropin is as everybody knows a godsend as a bladder cleaner, but as it will not act in alkaline urine, I am inclined to use Helmitol as a substitute, as it will act in both *alkaline* and acid urine. Of its alleged analgesic effect I have not yet been able to convince myself. Together with a European colleague I have observed signs of pain and irritation in the posterior urethra when the dosage of Helmitol has been pushed rather high. Some champions of Urotropin claim that it can be taken for years without harm to the patient, but recently a German observer claims to have observed renal albuminuria from its too long continued ingestion, hence while the matter is still “sub-judice” we are under some obligation to our patients to analyze their urine occasionally for albumen while undergoing a course of Urotropin.

Hydrostatic irrigations are still indispensable, but lately I have seen better results at least in the deeper and bladder irrigations from an apparatus of much simpler construction than the Valentine. When irrigating we are in habit of clothing our patient in a rubber sheet perforated so as to admit of

passing the penis through a close-fitting aperture, so as to protect his clothes. It must not be so tight as to pinch the inflamed penis.

To astringent injections, even the mild Ricord's Emulsion we are more opposed than ever and shocked to find our Philadelphia colleague Roedmann advocating compound prescriptions of "Zinc-Sulphate and potassium permanganate." Silver nitrate is astringent enough.

Tillmans of Leipzig, who recently honored Geo. Washington University and the Surgical Congress at Metzert-Columbia Theatre with his presence, recommends above all Alumnol for gonorrhœal urethritis, but I confess my experience is as yet rather limited with this preparation.

Resorcin I must concede I have not found as effective as I should like but in certain delicate subjects in the acute stage I have found it mild, and easily borne as a hand injection.

Intraurethral injections of "iodoform-glycerine" are agreeable and effective, especially where there is much pus, or where the patient is of a scrofulous diathesis, or where a few tubercle bacilli, or many puscocci are in the discharge. That tubercular urethritis is usually secondary to extension from the bladder we admit, but it is occasionally primary from vaginal contagion.

In salpingitis, and endometritis, etc., of a gonorrhœal character, or on a scrofula-syphilitic basis, Ichthyoldin tampons and suppositories are useful, and advisable to try before resorting to the radical operations which ought to come later in so many cases which will not get well under local medication.

Right here I wish to state that I have now under my care a number of pus tubes which are subsiding very nicely under antiseptic absorbing medication, whereas I also have patients on hand who have been whining invalids for years because of encapsulated tubal affections which should have been extirpated long ago, and which never had the benefit of even a trial at extractive antiseptic medications.

Picratol Boroglyceride Vaginal Suppositories are a good thing when inserted into the vagina at night, and supported by a Tampon and a vulval pad, but the class of women who have gonorrhœa as a rule are too careless to use a vaginal suppository themselves while at work in their offices or stores without staining their underwear severely.

I have some women patients who never will give me a chance to cure them completely, and who keep themselves

moderately clean by douching with Tyree's Antiseptic powder.

In posterior urethritis, and prostatitis in males I occasionally introduce "Cocoa butter bacilli" containing nitrate of silver which I introduce with Dittel's Sonde à Piston, *i. e.*, Dittel's Arznei Mittel Träger as furnished me by Lenz and Lossau, of Washington; when using this instrument we are pretty sure that we have no strictures of consequence, as it serves the purpose of a sound to some extent; however, where possible I try to avoid unnecessary instrumentation in the urethra and this instrument must be carefully used, otherwise when withdrawing the piston the sharp edge of the tube will cut the urethra.

If possible I try to avoid all instrumentation until the stage for sounds has been attained and I believe that *from the large number* of young men *who have come* to me with "gleet," and strictures, passable, but readily determinable with the Otis-Fowler Bulbous Bougie, and with the ever-present gonococcus which they should have eradicated before wedlock, that the regular old-fashioned curved sound is a much too little used instrument; coated with "Cocoa Butter Nitrate of Silver Salve," or "Lanoline Nitrate of Silver Salve" it affords a means of breaking up small periurethral pockets, and infiltrations of microscopic size, and bringing the most efficient gonococcicide known more deeply into the periurethral tissue than any other means. It also assures us of the passability of the prostate.

This reminds us of the necessity of prostatic medication. We are convinced that there would be fewer cases of prostatic hypertrophy in old men if there were less prostatic inflammation and there would be less Bottini-Freudenberg Operations, and Prostatectomies performed if men were not so philosophic, and careless about their prostates. Perhaps old age will always bring enlarged prostates, but anyone with a conception of pathology of inflammation must concede that a prostate battling all its life with inflammations is more or less likely to hypertrophy, at least more so than a "Virgin Prostate" if I may so designate the male organ which is analogous to the uterus. N. B. hypertrophy from inflammatory fibrosis.

However, the sound in unskilled hands is a dangerous weapon as every student is taught at college, and yet I have at present among my patients a young mulatto whose prostate is in a fearful condition from attempted forced passage of

sounds, and who even has fistulæ (urethro-rectal) from the malpractice to which he was subjected by one of his "color-mates" once a visiting surgeon to a local colored institution.

We believe in the flexible bougie coated with cocoa-butter, or lanolin-nitrate of silver salve, but used too soon, and by a surgeon without a sensitive touch, while the prostate is still soft and swollen by inflammation it may be a dangerous implement, and has caused more than one false passage into the prostate. Its field is in chronic cases with ulcerative foci.

The cystoscope is a valuable instrument especially as it enables one to tell with a certainty by inspection of the urethral orifices whether our patient really has two kidneys, so that we no longer need do as did Polk in his day, remove the only kidney which our patient has, *but the indiscriminate use of the electro-urethroscope is something much to be avoided.*

We advise hot, and warm sitz-baths and also rectal irrigation, but the strictest asepsis must be observed, or we will have rectal gonorrhœa as a complication. A warm water enema during a fecal impaction during an acute *prostatitis will stop* a severe *chattering* chill, and produce a refreshing sleep where all else has failed.

It should never be omitted and no more trifling procedures should be attempted before using it.

Traveling men, especially if the common complication of hemorrhoids supervenes can readily apply warmth to the prostate by using hollow aluminum, or rubber dilators filled with warm water, in this way some "prostatic expression" can also be attained, when the patient's fingers are not long enough to massage his own prostate adequately.

Lubraseptic is a convenient preparation for anointing the fingers during prostatic massage, and is also an efficient lubricant for sounds.

Carbolized vaseline and sterilized olive oil are ideal lubricants, but I have seen more than one case of proctitis set up by an infected dish of oil, or vaseline. Lubraseptic being in a collapsible tube into which the finger *can not* be inserted is hence a convenient office article.

Whether its antiseptic properties are as high as claimed by virtue of the allegedly contained formaldehyde I have not yet had an opportunity to convince myself.

After handling considerable material that has passed through other hands we come to the following conclusions:

1. Since we have never had a case of urethritis yet in our practice in which we have not found either gonococci or the so-called pseudo-gonococci, we believe the bacteriological determination of the bacterium before beginning treatment is practically an unnecessary procedure, and absurdity.

2. The determination, or at least search for gonococci, and the determination of their decrease while using a given local treatment is of some assistance in determining the efficacy of our chosen remedy, but is hardly necessary until we are well along in the chronic stage as we have plenty of clinical symptoms to go upon, and since I have been often able to still find the gonococcus in small numbers in the minutest shreds of an ulcerative spot, in men who have refused to wait until I have granted them a "marriage license" on bacteriological grounds.

3. With Bumm and Baumgarten I believe that most deeper purulent, or inflammations of a septic character are not so much the direct result of gonococci as of staphylococcus pyogenes aureus and the streptococci.

4. Although with Neisser *I believe* the staphylo, and streptococci are the most frequent cause of joint affections, so-called gonorrhœal buboes, etc., yet just as has Neisser—I have found the gonococcus alone in the fluid aspirated from joints even as remote as the ankle joint.

5. That the constitutional virulence of the gonorrhœal virus has been much underrated since the constitutional symptoms of gonorrhœa are often severe, and since gonorrhœal endocarditis is an established fact.

6. That prostatic massage and expression is a too oft neglected art and measure.

7. That most old men who suffer from considerable prostatic irritation, not merely hypertrophy, have been at some period of their lives victims of gonorrhœa.

8. That in old men with prostatic irritation, and œdema of the limbs of mild character and of kidney origin, Urotropin is for its uric-acid solvent qualities, and diuretic, and bactericidal effect a much neglected, but much to be considered measure—as does also Emil Suppan, of Vienna.

9. Although the clinical significance of albuminuria is to be viewed less pessimistically nowadays, yet the fact that one observer has noted albuminuria, or thinks he has, from its pro-

longed administration we ought to make careful control examinations of the urine while administering urotropin over long periods of time, in spite of the fact that it is claimed by some that it can be administered for years with impunity.

10. As to the pseudo-gonococcus we are willing to bow gracefully to this complacent and convenient differentiation but for all practical purposes we give the little villain the same therapeutic consideration that we do the real gonococcus (pears and apples of different shape or size, etc., are often dependent *on varied soil*) and if one worries about the fine differentiation we will often let a gonorrhœa get ahead of us.

11. If we grant to the supporters of the pseudo-gonococcus claim their correctness, we may find some excuse for non-infective wedlock on the ground that "successful marriages" have transpired with only the psuedococcus present, but for our cases there have always been sufficient clinical symptoms present to exclude this probability.

12. That an occasional beer-test is a valuable diagnostic measure to bring forth the remnants of a gonorrhœa after all discharge has apparently ceased in sub-acute and chronic cases.

13. The analgesic effect of Helmitol is still a matter sub-judice but worthy of observation.

14. That the symptom of perineal pain while pushing Helmitol to its maximum doses is not yet an established fact, but a strong probability, and that when once established will be a valuable therapeutic indication as to the attainment of the maximum dose of Helmitol in a given case having been attained.

15. In the treatment of acute anterior urethritis of milder form the protargal bougies are a useful little "makeshift," but must be used at night only to avoid falling out and staining clothes, or a bag or suspensory filled with cotton is a condition *sine qua non* when used in daytime.

16. The cotton-holding penis bag is also a clever little device, but in a virulently flowing, profuse gonorrhœa such as I have treated many, it would take much too large a supply for one patient, and in such cases especially in men having to meet pressing engagements the regular rubber "*penis bag urinal*" is much preferable as it is readily sterilizable, and at the same time prevents sudden embarrassing urinary mishaps, while at theater, or "other pressing social and business engagements."

17. Cystogen has its advocates but we candidly confess our experience has been limited as compared with urotropin.

18. Hexamine and some of the other hexamethylene-tetramine preparations I have used but not sufficiently to recommend or pass judgment on from clinical standpoint.

19. Nitrate of silver is still our best gonococcicide, but it should be never used, or prescribed unless the patient is warned against *stains* in his clothes which have only too often caused serious matrimonial complications, and even divorce.

20. Formaldehyde, or rather formalin glycerine, is an efficient sound lubricant, and antiseptic in some cases, where the sound treatment of urethritis is wanted, or indicated.

21. Of Peroxide of Hydrogen, we do not think much in virulent gonorrhœa but it acts well as a "ferret," *i. è.*, it shows us where the rats, *i. e.*, the remnants of gonorrhœa, yet are.

22. To reflect again on "Urotropin Albuminaria (?)" we must not forget that Kinney claims that it causes merely a pseudo-albuminaria.

23. We have never been a friend of the internal treatment by Balsamics and yet save for the gastric disturbance caused by them we must acknowledge their efficacy and permanency in our armamentarium, but one must never forget that the soothing influence they exert in inflammation of bladder neck are to some extent a therapeutic error, and such cases of perineal abscess, and deep stricture, etc., as have of late fallen to my share have usually given a history of balsamic treatment "for inflammation of neck of bladder" as the patients call it, and have arisen from a dormant infection which has suddenly blossomed forth into an active suppurative condition.

We have endeavored to discuss gonorrhœa, and its therapy from the "bacteriological-therapeutic standpoint." The other therapeutic measures necessary from a dietetic, internal-hydropathic, standpoint, etc., and the treatment of its various aggravating conditions and complications such as uric acid excess in urine, pyelitis, cystitis, etc., will probably be elaborated at some future time.

In uric acid conditions we must not forget Citarin (in powder), Piperazin, Piperazin water, Urotropin, Allouez, Magnesia Water, Cloverdale Lithia Water, Bethesda Water, etc. Beer must be given up entirely save where an occasional beer-test is called for during a gonorrhœa. The use of strong medical salts, such as sulphate of magnesia and other saline purgatives must be carefully interdicted during the acme of a gonorrhœa.

ON THE PREVENTIVE FEATURES OF DIFFICULTIES MERGING INTO SURGICAL NECESSITY.

BY M. O. TERRY, M. D., EX-SURGEON GENERAL, N. G. N. Y.,
UTICA, N. Y.

(Read at the Annual Meeting of the Surgical and Gynecological Section of the
A. I. of H., held at Chicago, June 26 to July 1, 1905.)

GENTLEMEN, I intend simply to treat of the etiological factors—of difficulties which usually end in the necessity for the surgical procedure.

This subject, which it is not my aim to elaborate to its fullest extent, will be dealt with in its relation to operations which have been a special source of study, observation and experience, and which have required the most delicate technique of our most skilled surgeons in hospitals and in private practice up to the present time.

The surgery dealt with and discussed at meetings of the institute, it will be noted, is confined almost, if not quite exclusively, to the history and most modern technique of the surgical operation under discussion.

The thought which is to prevail through this paper—is to trace severally the diseases which will be referred to—showing the physiological and other causative factors leading up to morbid conditions.

One side word right here—appropriate even to the young and brilliant graduate with a marked predilection to surgery as a life work: We believe that it is impossible to develop the best sort of surgeon without the preliminary training of general practice. At the period of graduation the young surgeon would be biased on operative lines. He would not have had time to scan the length and breadth, the height and depth of the human organism, a mechanism so intricate that a life-long study must even fail to fathom its mysteries in its psychophysiological and anatomical structure. It would seem, therefore, important that not only the normal relations of this intricate structure should be studied for a term of years, but that the various morbid processes should be thoroughly understood by experience in actual practice, so that the surgeon in question may ever be on the alert for reflexes—in their relation to any morbid process which might be under consideration. This rule certainly holds good in regard to any specialty, and I be-

lieve the safest and most scientific surgeon or physician of to-day is the one who has pursued that course of development before his fixation period into a specialty.

The whole trend of scientific thought to-day is to amend or to improve everything pertaining to the activities of life. Your health boards find it incumbent upon them not only to arrest the deadly epidemic of some contagious or infectious disease, but to probe deeply into the cause of the same. At your ports of entry your country is protected by methods of inspection, fumigation, and isolation if necessary.

Other illustrations might be given, but sufficient has been shown to picture the progress that has been made for the better by removing causes of disease and thus making it possible to have a far better average condition of health than in earlier times, when such painstaking methods were neglected.

This is Preventive Medicine, but our theme, gentlemen,—is Preventive Surgery.

If I were to select alphabetically the various surgical diseases which you gentlemen are called upon to treat—I would not succeed in emphasizing so well the subject under discussion as by the selection of those difficulties which have been brought to the surgical profession of more recent years.

In order to anticipate morbid conditions leading up to the demand for surgical procedure, let us first refer to the mysteries with which we have to deal, namely—the physiological process of life, and secondly—to the retrograde processes of metamorphose tissue which finally develop into various forms of malign and malignant disease and other inflammatory conditions requiring surgical intervention.

I have been convinced for a long time—and my convictions are becoming stronger each day—that the physiology of life is not sufficiently understood and is most sadly neglected. In order to prevent the hardening of tissues, in order to avoid the permanency of indurations, which—as you all know—after a term of years are liable to undergo morbid and progressive changes developing into medically incurable conditions, it is necessary that each individual set apart a sufficient time each day for the proper care of the body.

There is really so much to this subject it is quite difficult to select a point to enter upon.

It has been well said that “we are a mass of tubes, and unless the contents of these canals, vessels, tubes or ducts are kept

in motion, the equivalent of stagnation would result." Take for instance, gall stones. Search your books on gall stones and what do you find? All sorts of theories as to the cause of the formation of these stones, and among the clinical reports it is not unusual to find members of the profession therein tabulated, and what does this prove? Either that the real cause is not understood or that physiological laws have been intentionally neglected.

To show the importance of the regularity of physiological functions let me refer to an article recently published, in which it was stated, that a man during every twenty-four hours makes by the activity of the liver alone a quantity of poison sufficient to kill in twenty-four hours three men of his own weight. Man forms in eight hours enough poison to kill himself by this hepatic secretion. In twenty-four hours the urine does not eliminate half the quantity necessary to poison a man—the urine of two days and four hours would be required in order to do this. I quote this from Studebaker—who further states that the volume being equal, bile is nine times as poisonous as urine. And we might go on in detail and show how wonderful indeed is the process by which such a deadly poison is manufactured for physiological uses and yet is disposed of as normally as urea by the kidneys.

It is stagnation or the arresting of what we might denominate tubular vibration (a condition brought about by constipation—in most instances the result of neglect and inattention) which is the foundation of causes leading up to conditions which ultimately demand the operative procedure.

In gall bladder disease, as in others I shall mention, operations have as etiological factors diverted physiology, as just explained.

Now let us consider hypertrophy of the prostate. Here we have to consider a process due to senile changes, and therefore in some respects we may consider it normal; or a condition of arterio-sclerosis, a change gradually brought about by advancing age. Notwithstanding this, however, we are offering the suggestion that this condition can be anticipated and the sclerosis prevented by selected diet which has in view a more marked acidulation of the tissues. Acid fruits have a dissolving effect upon calculus formations. As an illustration of this thought you have noted the marked action of lemon juice upon the dentine of the teeth; in fact the statement has been made

that the action of this acid will dissolve even an agate button.

Undoubtedly by the regular use of a goodly quantity of liquids, acid fruits and watery vegetables, the tissues will remain more mellow, as it were, and there will be less liability to congestions, hypertrophy and tumor formations, often, we believe, the product of inordinate eating of a class of foods which take in the heavy meats. The reason why the latter diet cannot be as well tolerated as in the early years of the individual is due to the fact that muscular activity is greatly lessened, and as a result, elimination is less perfectly performed, resulting as a consequence, in all sorts of engorgements.

But let us for a moment direct your attention to a difficulty not depending upon physiological neglect. I refer to various trauma received upon the external surface of the body. To illustrate—a woman receives a slight blow on the breast, and this injury, or an abscess there during the process of nursing, or an irritation of the nipple, may be the foundation of an induration terminating in a morbid growth which ultimately becomes malignant. Now as we look at the various stages through which this injured part may pass, we have first—an induration, second—adenoma and fibroma, and then usually sarcoma or carcinoma. Early and painstaking attention to these conditions would have prevented, in our opinion, the first tumor formation or the adenoma, an innocent growth.

To the practitioner, I say, therefore, do not toy with a process of this kind unless you feel qualified to attend the case properly. Consult your surgeon, rather than inform your patient that it will amount to nothing.

Lastly—but not by any means the least, we are led to mention appendicitis. The name has become synonymous with surgery, but this should not be the case. It matters not what the surgeons may think—what experiences they have had as practitioners, clinicians or as professors of the art of deftness with the knife, I am quite as convinced now as I was in my early observations of the etiological factors leading up to appendicitis, that there must be something wrong in the life or habits of man which has brought upon him such a direful infliction. This we believe to be true: as true as in morbid processes connected with the stomach, bile tracts and duodenum, which now demand surgical intervention.

We fear that we have been too much inclined to a routine train of thought, considering results as of greater importance

than causes. The artistic operator finds in the appendix the coma bacillus, with possibly one or two other varieties of microbes, an occasional seed, or enterolith, and to these he ascribes the cause of appendicitis. The surgeon who practices his art exclusively is sure of one thing in regard to this sensational malady and that is that nothing but the knife can permanently save the patient afflicted. He is sure that medical relief must be palliative and that recurrence will happen until appendectomy has been performed.

Of appendicitis Dr. Osler states: "All colics mean appendicitis nowadays and are admitted on the surgical side, much to the detriment of the patient as a rule, with the sacrifice of several weeks in bed and the loss of his appendix, when perhaps his pain was due to a lobster salad of the night before. Pain in the stomach nowadays is always appendicitis and is recognized by the doctor's wife over the telephone."

We are glad to note some conservative remarks made in the section of surgery quite recently at the Illinois State Medical Society by Dr. Arthur Doane Bevan. On scanning the field, taking in the stomach and intestinal tract and while referring to the various conditions from a gastric irritation and ulcer to a carcinoma, his plea was "that the cases must be carefully selected and the surgeon must be sure that an operation is strongly indicated. Cases that can be cured by a summer's outing or by carefully selected diet should not be operated upon; nor should hopeless cases be operated upon. As to stomach ulcers, where intelligent treatment fails and they return and persist, then—and not until then—does the uncomplicated stomach ulcer become a surgical problem."

Now, let us mentally picture a human being in all the activities of circulatory life and then consider what effect the arresting of the normal action of an organ would have. Is it not true that we have successively hyperemia, congestion, inflammation and then destruction or a morbid process set up, or still worse? As soon as one organ becomes affected, immediately the whole system begins to sympathize or becomes involved to a greater or less extent. If it be the liver, at once the stomach and associate organs begin to feel the impress of diverted functions, which is followed by an arrest frequently of normal peristalsis. Or the difficulty may begin in the intestinal canal when the individual for business reasons neglects nature's laws for a more convenient season, and this is the fatal moment, for

it may be the beginning of a stagnation of various secretions, or a congestion of some of the organs, or an impaction in the colon—the initiatory steps to an inflammation, suppuration and possibly gangrene of the appendix.

In this age of preventive medicine, it would seem to me the duty of the practitioner, and of the surgeon as well, to instruct the families with whom they come in contact on the importance of a regular system of hygiene. This would take in regular and frequent baths, which would relieve the kidneys of much of their work. Also the importance of an absolute regularity of the intestinal functions cannot be over-estimated, for it is the neglect of this latter which is the cause of most cases of appendicitis.

Just in proportion as the people are educated to give time and attention to themselves, so that the machinery of the body will perform its duties without the assistance of the various cathartics so generally in use,—just so sure and in that proportion—will appendical difficulties decrease in number, until it will be brought to the attention of the physician and surgeon as only an occasional malady.

The medical profession is too humane and too advanced in higher education to encourage ignorance, but should rather take the position of instructors, which, we must admit, might be unwise from a mercenary standpoint,—yet a physician's duty to himself and to the public, and the responsibilities incident to his calling, would seem to demand a personal sacrifice for the philanthropic ends in view.

Finally—how best can this education be carried on? By unity of effort on the part of the medical profession—a bureau elected for that purpose, composed of men especially gifted in dietetics, could formulate a system of diet and management of our bodily structures. This could be given to the press from time to time as coming from this organization and as representing the most recent thoughts on the subject. I have been glad to note during my professional career the marked willingness of the press to print gratuitously anything pertaining to the welfare of the people at large.

I am sure that the public, regardless of education or social standing, afflicted as they are alike with the multitudinous processes of various diseases,—would welcome the magnanimity and the humanitarian instincts which would cause the medical profession—as a body—to issue instructions which

would have in view the prevention of the same, the outcome of which the title of my paper foreshadows, and which lead up to morbid, or organic changes, incurable or demanding surgical intervention, for palliation or for permanent eradication.

THE TREATMENT OF FRACTURES OF THE PATELLA.

BY GUSTAVE A. VAN LENNEP, M. D., JUNIOR SURGEON TO THE
HAHNEMANN HOSPITAL, PHILADELPHIA, PA.

(Read before the Wm. B. Van Lennep Clinical Club.)

BEFORE considering the details of treatment of fractures of the patella, it would perhaps be well to review the pathology of the condition in order to thoroughly understand the principles involved in the management of a case.

It seems to me that too much importance has been given to the fracture, and too little thought taken of the associated tears in the aponeurotic and fibrous structures surrounding the bone. We may consider the patella as a large sesamoid bone lying within the fibres of the tendon of the quadriceps extensor muscle, and forming a part of the anterior covering of the knee joint. On either side of the patella, spreading well on to the condyles of the tibia below and the femur above are the aponeurotic extensions of the vasti muscles, which are intimately adherent to the fascia lata and the ligaments of the joint, and in reality make up the anterior capsular ligament.

The inner or posterior surface of the patella is covered with articular cartilage, and plays on the trochlear surface of the femur. To its apex the ligamentum patellæ is attached. Between the bone and skin is a bursal sac, another lies between the ligamentum patellæ and the tibia. The patella may be roughly described as being the bony centre of an aponeurotic circle occupying the anterior surface of the knee joint, and directed in the course of the rectus femoris muscle.

Fracture is produced almost invariably by powerful contraction of the quadriceps muscle or by forcible and sudden flexion of the knee, or by a combination of both forms of violence. The fracture in this instance is transverse and located about the middle, or at some point below the middle, of the

bone. In some instances the lower fragment has been further fractured longitudinally. The damage, however, seldom ceases with the break of the bone, but the fracturing force continuing, the lateral aponeurotic expansions of the vasti are torn to a variable degree, allowing of wide separation of their torn lips and also of the patellar fragments. The fibro-periosteal layer covering the bone is torn away so as to form a good sized fringe which falls over the fractured surface of the upper fragment and interferes with union. The same condition takes place in connection with the lower fragment, though usually to a lesser degree.

Direct violence will produce a comminuted or an irregular fracture, sometimes compound, with little or no separation, unless the aponeurotic slings are torn. In both forms there is free hæmorrhage from the fractured surfaces which forms an intra-articular clot; and also a rapid synovial effusion, which distends the capsule and further separates and tilts the fragments, thus acting as an obstacle to reduction.

The first indication to be met in the treatment is the limitation and reduction of the effusion. It is useless to attempt reduction until the synovial sac has been first emptied of its fluid. This can be ordinarily accomplished by elevation of the limb upon an incline plane, keeping the knee in full extension, and the application of elastic pressure and cold. A rubber bandage may be used, or better a flannel figure of eight bandage, and over it an ice bag. This treatment is continued for a few days, say up to one week. By that time the effusion has gone down sufficiently to allow of approximation of the fragments. This is best accomplished by the use of two strips of adhesive plaster, one encircling the lower fragment to steady it, and the other grasping the upper fragment and drawing it down as much as possible. Accurate approximation of the fractured surfaces is seldom obtained, and more or less tilting forward of the fragments occurs. A third strip of plaster is sometimes used over the fragments to prevent this tilting.

The limb should be immobilized on a straight posterior splint and elevated on an incline plane, and the knee kept extended at all times. In order to further immobilize the leg Scudder recommends the use of lateral splints, and he also uses coaptation splints over the lower thigh held in place by encircling straps to steady the quadriceps and overcome its pull upon the upper fragment.

Massage of the entire limb and particularly of the quadriceps muscle is an important item in the treatment, and in order to make it effective it should be given at least twice daily, for from twenty minutes to half an hour at each time. All the dressings are let down, with the exception of the adhesive straps, and the upper fragment is steadied by an assistant. Great care should be taken not to bend the knee. Massage is at first unpleasant, but it soon becomes painless and a source of great comfort and benefit to the patient. It not only stimulates the circulation and nutrition of the limb, but also prevents that annoying atrophy of the quadriceps muscle, which leads to such subsequent disability. It has been my experience that it materially shortens the convalescent period.

This treatment of fixation, elevation, and compression is to be kept up for a month or six weeks. At the end of that time it will be found that all fluid has left the joint, and a removable plaster-of-Paris cast should be applied, and the patient allowed to go about with crutches and later a cane. This cast is to be worn for six months, and under no circumstances should the patient be allowed to walk without it. Passive motion should be used and the patient allowed to actively flex and extend the leg without bearing any weight on it. For another six months protection against accidental full flexion must be provided by some suitable form of knee support. I prefer the light leather knee cap. At the end of one year from the accident all support can be discontinued and full flexion of the knee allowed.

Cases of refracture are quite common, and are almost invariably due to forcible flexion before the joint has been thoroughly limbered up. The following case serves to illustrate this point:

J. S., 51 years old. Fractured the right patella during the fall of 1901. The treatment just described was carried out, and a good fibrous union obtained with separation of about one-half inch. The patient who was an engineer went back to work in about six months wearing a leather knee splint. There was some limitation of flexion. On February 9, 1903, he walked out without his splint, slipped on a bit of ice, and bent his leg forcibly in falling. Examination showed a second fracture of the patella through the middle of the lower fragment. The first fracture was intact, the middle piece of bone was about one-half inch in thickness. The same treat-

ment was instituted as after the first fracture and ultimate recovery resulted with a strong useful limb. He returned to work in June of the same year.

Aspiration of the knee joint is indicated where the effusion is very great, and the operator is skilled in perfect aseptic technique. It seems to me that there is some risk of infecting the joint from the carrying in of septic material from the layers of the skin, so that if I was to do the operation I would first make the skin incision, then introduce the needle through the remaining structures and empty the synovial sac, then seal the wound antiseptically. The operation should be followed by firm even pressure to prevent reaccumulation of the fluid.

The objection to aspiration is that it accomplishes nothing that could not be done by slower methods, and in addition it subjects the joint to a chance infection that would most surely prove disastrous. Then again we never can hope to remove blood clots by the aspirating needle. I believe the method should be discarded, and certainly never undertaken by a general practitioner or one who is not blessed with an antiseptic conscience.

While the treatment just described is safe, and promises usually a satisfactory result, and is the one to be followed by the average physician, it almost invariably gives fibrous union, and at times wide separation of the fragments. Since the advent of the antiseptic days surgeons have operated upon these cases with a view of accurately approximating the fractured surfaces and holding them in apposition until good close union could be obtained.

Without going into the details of the different methods that have been practiced, I will say that the present operative interference consists of a fibro-periosteal suture with absorbable material, and closure of the wound without drainage. The fracture is thoroughly exposed by a longitudinal, or as some prefer, myself included, a transverse incision. The joint is opened and thoroughly cleansed of all blood clots by irrigation with physiological saline solution. Loose fragments of bone should be removed. The torn fibro-periosteal fringe is lifted from the fractured surfaces and trimmed away. All loose shreds of tissue are cut away, and hæmorrhage arrested as much as possible. With No. 1 chromicized catgut a continuous suture is put in, uniting the edges of the torn fasciæ on either side of the patella, and continued over the bone uniting the edges of the

periosteum. The skin wound is closed without drainage, and the limb immobilized. In two weeks a removable plaster-of-Paris cast is applied, and the patient allowed to go about on crutches. Massage and gentle passive motion are done daily, and in three months' time the knee should be functionally perfect.

While the results obtained by the operative treatment are brilliant, and the convalescent period is materially shortened, it must be remembered that they are accomplished not without some risk. The operation should be undertaken only by surgeons of great skill, who have at their command a corps of trained assistants and who are in a position to work under the most rigid aseptic conditions. In fact I believe all such cases should be operated in a hospital, where the surroundings are conducive to perfect technique. The occasional surgeon has no business to meddle with this operation. A closed fracture of the patella does not in itself endanger life, and if properly treated by the conservative method the result will often be entirely satisfactory. When operative interference is undertaken there is the risk of infection, and the results of infection are always disastrous: A stiff knee; amputation of the thigh; death from septico-pyæmia.

The operative treatment is the surest method of securing apposition and bony union, and under favorable conditions should be selected. The acute symptoms should be allowed to subside, a week or longer from the accident is the most favorable time to operate. It should be confined to healthy individuals under sixty years of age. It is especially indicated where there are extensive lateral fascial tears and wide separation of the fragments, and also in the presence of great joint effusion. It is the method to follow in case the patient is anxious to early resume an active life, with every prospect of a functionally useful limb.

The following case is interesting: Male, 24 years of age. Walked into the dispensary of the Hahnemann Hospital with a transverse fracture of the patella of five weeks' standing. He had been told he had a sprain of the knee, and continued to walk about as best he could. He was able to flex and extend his knee somewhat, but could not go up or down stairs. There was no effusion, some ecchymosis. Separation of fragments at least one and a half inches. On opening the knee joint by the transverse incision, a partly organized blood clot was found

lying upon the condyles of the femur and adherent to the edges of the fragments of the patella. There was no attempt at union of any kind. The fractured surfaces were smooth and covered with fibro-periosteal fringes. Moderate lateral fascial tears were present, accounting for the slight amount of function possible. Suture was done and the result was entirely satisfactory.

Compound fracture of the patella is always a most serious accident, and must be treated upon the supposition that the wound is always an infected one. In all cases the wound should be enlarged and the joint cavity thoroughly flushed out, paying special attention to the synovial pouches behind the condyles of the femur. To do this the knee should be alternately flexed and extended. Corrosive sublimate, carbolic acid, or formalin solutions should be used, followed by saline irrigation. The fragments should be sutured and the wound closed or drained according as the judgment of the surgeon indicates. If pus forms, the joint should be laid open widely and frequently flushed with antiseptic solutions.

Disability after fracture is at times very marked. It may be due to faulty union, or as is more common to retraction and adhesions of the soft structures of the joint. Sometimes hypertrophy of the fragments, particularly of the upper one, seem to interfere mechanically with the function of the joint. Under these circumstances excision of the upper fragment has given good results.

Refracture of the bone calls for full extension and fixation until union takes place. Some surgeons recommend suture.

My experience with the operative treatment has been so uniformly good, that I should have no hesitation in recommending it in suitable cases. The patient should be informed of the probable outcome of both methods of treatment, and the dangers of the operative method should be fairly stated. If then an operation is undertaken the responsibility of success rests mainly with the surgeon.

CRETINISM, WITH REPORT OF A CASE.

BY EDWARD G. RANDALL, M. D., WATERVILLE, N. Y.

(Read before the Medico-Chirurgical Society of Central New York, June 1, 1905.)

CRETINISM, or to speak more broadly, Myxedema, is a subject that has been largely discussed in journals and text-books for the last quarter of a century, and for that reason the writer presents this topic with many misgivings and at the risk of "carrying coals to Newcastle"; but although the subject appears so frequently in literature, it is still comparatively rare for the general practitioner to meet with cases of this sort. Moreover, when such cases are met with, treatment is so brilliantly successful in the light of our present knowledge that it would be a pity indeed, for any unfortunate sufferer to be denied its benefits, which are so easily obtained if the nature of the disease be recognized by the physician.

Myxedema is a general term covering all cases in which there is a mucoid deposit in the sub-mucous and sub-cutaneous connective tissues resulting from absence of, or diminished function of the thyroid gland. Associated with this deposit we find a sluggish mentality, a lowered bodily temperature, and disturbed, or even abolished nutrition. This condition was first described by Sir William Gull in 1873, who associated it with the absence of thyroid function even as we do to-day, and although more recent writers have ascribed the symptoms to changes in the sympathetic nervous system, the consensus of opinion has reverted to Gull's theory, and thus it remains at present.

Since Sir William Gull described the disease under the name of the "Cretinoid (or idiotic) state," other writers have termed it variously, as "Myxedema" (Ord), "Cachexie pachydermique" (Charcot), "Athyrea," etc.

For purposes of discussion we generally recognize two classifications of the disease, first according to occurrence, viz.: *Endemic* and *Sporadic*, and second according to the condition of the individual, viz.: *Cretinism*, when occurring congenitally or before puberty, *Myxedema* of adult life when it usually occurs in connection with thyroid disease, as chronic interstitial thyroiditis or sometimes with goitre, and *Operative Myxedema*, (cachexia strumipriva), when it occurs as a result of partial or total extirpation of the thyroid gland.

Of the etiology of the disease there are several factors to be considered. It has been observed that females are in the majority of those affected. The endemic variety seems to choose mountainous districts, as the Alps, Pyrenees and other regions where goitre is also prevalent. Heredity plays its part, children of goiterous or of neurotic parents being somewhat predisposed to the disease; interbreeding is believed to favor it and a popular notion that coitus during intoxication may beget myxedematous children is not altogether without foundation.

The pathology of the disease is very obscure. Whatever the function of the thyroid gland is, we know that when that function is interfered with there are positive and marvelous changes in the whole organism. These changes have been alluded to and will be further discussed along with the treatment of the disease under the head of Cretinism, it being the purpose of this paper to deal with that variety of Myxedema only which is congenital, or occurs before puberty.

In Cretinism proper, then, we find that the disease may begin *in utero*, but usually it follows some severe febrile attack occurring in the first four or five years of life. Its symptoms are not always noticed until it has progressed for some time. Then the typical changes begin to appear. The growth is stunted or parts of the body grow disproportionately. The limbs are crooked from deficient deposit of mineral substances in the long bones and from epiphyseal distortion. The ends of the bones are large, as in rachitis. The trunk is too long for the rest of the body. The chest is large and flat. There is sometimes lumbar lordosis, giving the body an ape-like appearance. The hands are large, coarse, puffy and spade-like. The hair is rough and coarse, or falls out. The face is large and wrinkled, the eyes far apart and nearly buried in full, bloated lids. The tongue is swollen and protrudes between swollen lips, and the breathing is stertorous. The milk teeth disappear early and are never replaced unless under treatment. The skin is dry, yellow and wrinkled. The swollen ears project and the neck is thick and bull-like. The facial expression is characteristic of the disease, and is idiotic in varying degrees, from an appearance of stupidity and apathy, to one of absolute vacuity. Many cases are deaf and dumb. There is little or no muscular power and the patient can often not stand alone. The whole aspect of a well marked case is monstrous and disgusting in the extreme. It is hardly necessary

to add that the sexual functions are completely in abeyance, the patient never arriving at puberty. In fact, except for a gradual intensification of all the symptoms, these idiots remain *in statu quo* for the rest of their lives, or make only slight progress, unless relieved by appropriate treatment, and it is no uncommon thing for such a creature to live upwards of 30 or 40 years and yet remain in its infantile state. To the everlasting honor of Horsley and Murray, who was the former's pupil and assistant, we are able to relieve these unfortunates by a most rational procedure, and one not at all difficult to carry out. This brings us to a consideration of treatment.

The treatment of Myxedema in any of its various phases consists mainly in the administration of thyroid or its extract in some form. The thyroid of the sheep was used at first in its raw state or minced and mingled with other food without cooking. It has been directly implanted, by surgical means, with varying success. A glycerinized extract has been very successfully used, and when rendered sterile by the addition of carbolic acid, is injected hypodermatically. For this method of procedure I would refer you to Anders' Practice of Medicine, sixth edition, page 467. A favorite method of administering thyroid is in the form of the dried extract made into tablets. When prepared by a thoroughly reliable house this method is free from objection, and is the most convenient of any. The dose should be small at the beginning of treatment, watching carefully for symptoms of thyroidism, which are restlessness, rapid pulse, vertigo, headache, syncope, vomiting, diarrhœa, even delirium. Should these symptoms supervene, the remedy should be discontinued, and begun again with a smaller dose after the disappearance of the toxic effects. It is well to commence with one to three grains of Parke, Davis & Co.'s preparation of the dried extract, gradually increasing the dose without producing the toxic symptoms, and continuing to use a quantity which seems to secure favorable results, without making too much haste. Inside of a month the effects should begin to appear, and the improvement is likely to be along all lines. The bloat gradually disappears, the eyes grow bright, the breathing becomes free, the nutrition is improved, the skin takes a healthy tone, and the stature begins to increase. A remarkable feature of this is that in experiments made by Drs. Wagner and Jauregg, covering 35

cases for a period of 15 months, they found that under the thyroid treatment the majority of cases grew from nothing to 10 c. m. *more* than a normal child would during a like period. With all this trophic change there is a corresponding improvement in the mental condition. Patients learn to talk, and in short, the entire organism comes out from under the cloud and begins approximately where it left off. From this time on, it is often only necessary to give the thyroid extract at intervals of two to seven days, each case being governed as the conditions require. But the continued use of the thyroid is imperative or the myxedematous symptoms will return.

The other therapeutic measures should be symptomatic. The patient's subnormal temperature indicates warm climates when attainable, warm baths and warm clothing. Diet should be non-nitrogenous to a large extent. Other remedial agents have been used, but with results so inferior to the thyroid treatment that they need not be mentioned. Drugs prescribed according to any therapeutic principle seem superfluous, except when intercurrent conditions arise which are amenable to such treatment.

The case which I wish to bring to your attention is a very good illustration of the foregoing review of the subject.

E. F., female, was born on the 4th day of July, 1889. So far as I am able to learn from her grandmother, she seemed normal until she was eight months old, when she had a so-called "cold on the lungs." This was a very severe illness and she never seemed to rally. From this time on she developed very slowly: she was backward and apathetic, and lacked the usual vivacity of childhood. When she was three years old the symptoms had increased in severity so that physicians were consulted. Altogether she was shown to seven or eight physicians, none of whom arrived at a correct diagnosis, most of them ascribing her condition to some obscure spinal trouble. From this time on her growth was absolutely *nil*, and the myxedematous conditions increased so that she became a most repulsive object and absolutely helpless. When the writer first saw her in the fall of 1901, she was twelve years and a few months old. I regret very much that accurate measurements and weight were not secured at this time, but it will convey a fairly accurate impression if I say that she appeared then to be about the size of an eighteen months old child. The thyroid gland could not be palpated: her face was bloated and the

tongue swollen. Breathing was stertorous. She was said to have intelligence enough to show pleasure at seeing persons whom she knew, but there was not the slightest ability to speak, and she was practically an idiot. There had never been any control of the sphincters, and diapers were required as with an infant. Her grandmother states that her second set of teeth had appeared but were so diseased that they were all extracted. The face was puffy and wrinkled; the hands broad and rough, with brittle, striated nails. The hair was thin and ragged. The eyes were nearly closed, the lids puffy, the limbs crooked, the belly flaccid, and in short, she was a very typical case of sporadic Cretinism. I was not consulted in behalf of this patient, but for another member of the household, as all hope of relief for the child had been given up years before. The incredulity of the grandmother, (who was the child's guardian), when I expressed a belief that the case could be relieved can readily be imagined. But after promising that I would furnish the medicine for a month's treatment without expense to herself, I was permitted to make a trial. I procured a bottle of Armour's thyroid tablets (5 gr.), and gave her two a day. I was soon convinced that one a day would be better as the symptoms of thyroidism appeared, although not to a very violent degree. At the end of two weeks there was a perceptible improvement, first noticed in a brightening of the eyes, and a look of more intelligence. This was due more to the slight reduction of the edema of the face than to any real gain in mentality. From that time on the thyroids were given with some slight interruptions for various causes, and within six months she began to walk. Her stature increased until now she is 43 inches tall, and weighs 61½ pounds (Feb., 1905). Her hair has grown in like any healthy child's, a new set of teeth has appeared, her speech is coming, and her mind is as bright as that of any little girl of five years of age. She runs around with other little children and seems to enjoy life very much. Soon after her improvement began an inguinal hernia appeared, due to the flaccid state of her muscular system. This was relieved by an appropriate truss.

About two years ago, the financial condition of her guardian was such that she was relieved of the care of the child by the county authorities and she became an inmate of the Rome Custodial Asylum. Since that time I have had no supervision of her, but I understand that she is doing nicely, and takes part

with the other children of the place in their games and exercises. The dose of thyroids has been reduced to 2 grains of the extract once a day for three days, at intervals of two weeks, and that amount seems adequate to her present needs.

The moral of this case is that she will never be what she would have been if the disease had been recognized within a year or two of its inception. After a lapse of ten years it can hardly be expected that such a case can ever become normal. Early recognition of the disease gives us the opportunity of serving our patients in such a way as to earn their endless gratitude, and to save these unfortunates from a condition infinitely worse than death.

BIBLIOGRAPHY.

Burr, Charles W., "Diseases of the Nervous System."

Anders, "Practice of Medicine."

Goodno, "Practice of Medicine."

Osler, "Practice of Medicine."

Gould and Pyle, "Cyclopedia of Medicine and Surgery."

Church and Peterson, "Nervous and Mental Diseases."

American Medicine, Vol. VIII, No. 16, p. 699, Extract quoted from Wiener klin. Woch. No. 30, p. 835. (Wagner and Jauregg.)

CLINICAL CONFIRMATION OF A PECULIAR SYMPTOM.

BY W. S. SEARLE, A. M., M. D.

DURING the three or four years last passed I have suffered from a mild but continually increasing angina pectoris.

I may state that my father, in his later years, also complained of occasional attacks of a similar nature, as also, have my brother and sister.

In my own case these attacks occurred only occasionally and in the evenings, after even a very light supper.

A gradual but unmistakable increase of the disease was remarked. The attacks began to appear in the afternoon also, and a dull, aching in the left arm, during them became more and more noticeable.

On walking at an ordinarily brisk pace a dull, aching pain began in the cardiac region. It seemed as if the heart were turned to a stone. My pace must be slackened, and a slight dyspnea was noted.

Alcoholic stimulants were useless as palliatives. The outlook seemed quite discouraging. But on careful and protracted search for the similar I happily hit upon the following in "Allen's Handbook," p. 54, under "Ambra," the following:

"Palpitation when walking in the open air, with pressure in the chest as from a lump lodged there or as if chest was obstructed."

Most of this quotation is italicised, but should now, I think, be still more emphasized, for after using the tincture of that drug in doses irregular as to time, this distressing symptom has entirely disappeared during the past few months, and my anxiety as to the issue has been wholly relieved.

If this experience shall be confirmed by others, as I feel sure it may be, this brief narrative will justify its appearance in print.

THE EFFECTS OF ALCOHOL UPON THE HUMAN SYSTEM.—In a recent address, Sir Frederick Treves, England's most eminent surgeon, expressed himself as follows upon the effects of alcohol upon the human system:

Alcohol is distinctly a poison, and its use should be as strictly limited as that of any other kind of poison. It is an insidious poison, producing effects for which there is no antidote but alcohol. It is not an appetizer, and even in small quantities hinders digestion. Its stimulating effect lasts only a few minutes, and after that has passed, the capacity for work fails enormously. It brings up the reserve forces of the body and throws them into action, with the result that when they are used up there is nothing to fall back upon. On the march to Ladyship, the soldiers who were drinkers fell out as though they were labelled. The use of alcohol is inconsistent with work which requires quick, keen, alert judgment. The use of alcohol is emphatically diminishing in hospital practice and among professional men who work hard during the day. The speaker concluded as follows: "I have spent the greater part of my life in the operating room, and I can assure you that there are some persons I do not mind operating upon and others that I do, but the person, of all others, I dread to see enter the operating theatre, is the drunkard."—(*Century*.) If all the above is true as it stands, then it looks pretty badly for alcohol. The gist of the matter is that alcohol should be used intelligently and upon its well known indications. It was never intended to take the place of table-waters, as some men seem to imagine.

EDITORIAL.

THE STATE BOARD EMBROGLIO.

At the June examinations held by the Pennsylvania State Board of Medical Examiners, a most unfortunate occurrence took place. Two of the questions propounded were not in accord with the ideas of the President of the State Medical council, who also occupied the office of President of the old school Board of Examiners. Accordingly he telegraphed the old school board meeting in Pittsburgh to make changes in the objectionable questions, but failed to notify either the Eclectic or Homœopathic Boards.

In acting thus we believe that Dr. Beates intended no deceit; but was unduly precipitous. If he acted as president of the medical council, he should have notified all three boards; if as president of the Allopathic Board, he was guilty of insubordination.

The consequences of his thoughtless act may prove most serious. His disregard of the rights of his colleagues must lead to strained relations in the future. This will mar the quality of the work of the medical council.

The legal aspects of the case are, however, even more serious. The State Medical law provides that the questions shall be framed by the medical council; also that the same questions, excepting in therapeutics, shall be presented by all three boards. This leads us to make the following queries:

1. The State law having been violated, are the licenses issued to the candidates before the Allopathic Board legal?

2. Even though this question be answered affirmatively for the present, may not occasions arise in which the technical standing of the candidates as legal practitioners will be questioned?

3. Has Dr. Beates's action invalidated all the June examinations?

4. What guarantee have we in the future as to the proper observance of our State Medical laws?

Just as we pen the above lines, a newspaper comes to hand announcing that the June examinations are valid, the opinion being based upon the general legal principle that when the remedy proposed is worse than the condition it is intended to rectify, that remedy must not be applied. Certainly such a ruling is justice to the young physicians who at an expenditure of much time and money attended and passed the examinations in Pittsburgh, Philadelphia and Harrisburg.

This whole unfortunate affair should be a lesson to the offender who, though a man of brilliant ability, and sterling honesty, has in this case acted with undue haste and poor judgment.

A POINT FOR PUBLISHERS AND MEDICAL READERS.

WE have spent the afternoon, comfortably reading a work by one of the authors of classical fiction. The volume in question is printed on paper of fine quality, five hundred words to the page, and includes one-thousand pages bound in limp leather. It weighs just eight ounces. The amount of reading matter contained in it equals that of Osler's *Practice*, or one volume of Goodno's treatise, which books weigh between six and seven pounds. All students who have studied much from these works can appreciate the inconvenience of handling these, and other ponderous tomes. To them, the reading of the small books such as we described at the opening of this article, is a luxury. In their interest, we ask why cannot medical men be served with literature in like convenient form. It is said that a certain clergyman deplored the sombre melody of the average church music and determined that in his church at least, the good music should no longer be monopolized by the Devil. And we say why should not the publisher consult the comfort of the scientific as he does that of the lay reader?

The solution of this question is one of pure business. A work of the character referred to costs as much for composition or type setting as do the large ones so much in vogue. The press work so far as number of tokens is the same, but the printer does not require so large a press for the work. The paper will be much less in quantity, but it must be of an unusually fine quality to enable it to withstand the wear and tear of frequent reference. While, therefore, there is some saving

of paper, that saving is not great. The total expense in bringing out the smaller book would probably be as much as 80 per cent. of that involved in producing the larger. A five-dollar book, such as Osler's, could not be sold for less than four dollars in the form we suggest. The buyer too often looks at the size of his purchase and declines to become a customer because he does not see his money's worth in a volume which can be carried in his pocket. Until their readers are educated to the convenience of light and portable volumes we fear publishers will not attempt to supply the want. Of course works that are freely illustrated with half-tones, must be published as at present. But no such objection obtains in the presentation of light-weight books with no illustrations.

Too often it happens that the doctor's hours of study come at the close of the day, when he is physically tired. We believe that if he were supplied with light-weight volumes, he would read more, obtain greater enjoyment in study and purchase more books.

CONCERNING ONE VARIETY OF BOOK-FAKING.

As we have stated on previous occasions, doctors are made the victims of many varieties of sharp and fraudulent practices. Of late a new species of swindling has come to the surface. It relates to the book trade, and we are happy to say the offenders are not related in any way to publishers of medical works. The scheme resolves itself into securing signatures to an order ostensibly requesting that the books be sent on approval. But said order is so skilfully worded that it becomes a legal contract to buy the work on easy instalments. Should the subscriber fail to pay even one instalment at the times stated, the whole amount becomes due at once. From cases in which this game has been played, it seems that the object of the concern doing the trick is not so much to deliver the books as it is to compromise the account of say one hundred dollars on the payment of twenty-five per cent. of that amount. Thus the same set of books may be sold many times over. Physicians cannot be too careful in patronizing the many schemes offered for getting something for nothing. We once out of curiosity replied to an advertisement offering a fine engraving for nothing without incurring obligation. We re-

ceived the engraving as promised, but we were annoyed by skilful perseverance on the part of the agent of the concern in the hope that we would be ultimately shamed into becoming a business patron of the concern. To tell the truth, we did feel somewhat small and received our only justification in the "slick" mannerisms of the agent.

THE YELLOW FEVER EPIDEMIC.

THE August issue of the HAHNEMANNIAN MONTHLY contained an editorial comment on the mosquito as a carrier of disease. Mention was made of the fact that the results of modern investigations seem to prove that yellow fever is a disease which depends solely on the mosquito for its transmission from one individual to another. The epidemic of yellow fever now prevailing in New Orleans is the first epidemic of this disease which has prevailed in this country since the theory of transmission by mosquitoes was developed, and it affords an excellent opportunity for testing the truth of this theory, and of ascertaining whether a campaign against mosquitoes will have any practical value in preventing the spread of the disease.

According to the views of those investigators who have studied the yellow fever problem in Cuba and elsewhere, the only natural method that is known by which yellow fever is transmitted to a healthy person is by the bite of mosquitoes previously infected by biting a patient sick with yellow fever during the first three days of the attack. No species of mosquito except the *stegomyia fasciata* has been proven to be capable of transmitting the disease. The infected mosquito is only dangerous after an interval of twelve days from the time it has ingested virulent blood. Contact with a patient, clothes, excretions, etc., are incapable of causing yellow fever.

If these propositions are true it follows that the spread of yellow fever could be checked, first, by strict isolation in mosquito-proof quarters of all cases of yellow fever and all suspicious cases; second, by destroying by fumigation all the mosquitoes possible, infected or not.

The attempts to eradicate yellow fever from New Orleans by a crusade against mosquitoes, at first seemed only partly suc-

cessful. Up to August 15, the total number of cases was 1,122 and the number of new cases was steadily increasing. The explanation of this condition is not hard to find. The vast majority of cases were confined to the old quarter of the city. This is densely populated with an ignorant foreign element. Many landlords and tenants refused to screen their cisterns and houses. Some patients were concealed by physicians and many went without medical aid rather than submit to isolation measures. The following quotation from a daily paper shows how the work of the health authorities was impeded: "Not only do the Italians refuse to report cases and follow the instructions of the doctors, or to take sanitary precautions, but they have recently been threatening the health officers and necessitating the use of violence to force the sanitary regulations. It has been found impossible to leave sick Italians at home to care of their families, and in future all Italian victims of the fever will be taken to the Emergency Hospital. This will entail the establishment of another emergency hospital. It is probable that the old St. Louis Hotel will be sequestered and used as a detention camp for Italians." It was found impracticable under civil rule to attain the perfect sanitary measures that were instituted in Havana under military government.

Since the United States Marine Hospital Service has taken charge of the work of stamping out the epidemic a change for the better has already been reported. On August 20, the total number of cases reported was 1,385 and the total number of deaths 194. The last five days, August 15 to August 20—show only twenty-six deaths against forty-seven for the previous five days. The last two weeks in August usually mark the height of a yellow fever epidemic. In August, 1853, the deaths for these weeks was fifteen hundred a week. It is believed by experts that the present epidemic is already under control and that with a strict enforcement of modern methods the disease will be stamped out in three weeks.

If such shall prove to be the case it will be another wreath added to the laurels of the medical profession of America. Only a few years since yellow fever was with good reason the constant terror of our Southern seaport cities. In New Orleans alone as many as eight thousand people have died in one year from this dread disease. We accept the fruits of long and careful research on the part of medical men, not a few

of whom have sacrificed their lives in this work, as a matter of course. It is impossible, for the laity, especially, to realize what a boon the knowledge gained by such labor and sacrifice has been to our country and to mankind. If the efforts now being made to stamp out yellow fever prove successful, let us not forget to honor as national heroes and benefactors those men who have given their labor and their lives to this work.

MEETING OF THE STATE HOMŒOPATHIC MEDICAL SOCIETY.

THE meeting of the Homœopathic Medical Society of Pennsylvania to be held at Altoona, September 19th, 20th and 21st, gives promise to be one of the most successful meetings in the history of the Society. Already about sixty new applications for membership are in the hands of the secretary. An excellent program has been prepared, with papers dealing with every department of medical science.

Great credit is due to Dr. Seibert, President of the State Society, for his able and untiring efforts to secure a good program and arrange everything for the comfort and pleasure of the members. Dr. Seibert should have the loyal support of every member of the Society in making the meeting a success. It is the earnest wish of the Society that every reputable homœopathic physician in Pennsylvania should be enrolled as a member. It has only been through such organizations that homœopathic physicians have been enabled to secure equal rights and privileges with other physicians, and any advance which our school is to make in medical science or in influence must be made through the united efforts of its members banded together in an organization.

If those physicians who are now so indifferent about this matter could realize how many of the privileges they enjoy are due to the work and influence of our State societies they would be glad to unite in the work. Let every homœopathic physician in the State take a personal interest in this matter and make the Altoona meeting a record-breaker in numbers and in enthusiasm.

GLEANINGS.

INDICATIONS FOR TREATMENT OF GASTRIC HEMORRHAGE.—F. Gregory Connell discusses the subject of gastric hemorrhage as related to ulcer, says that in acute symptomatic hematemesis, prophylaxis is the only rational treatment; that is in chronic ulcer radical cure should be instituted before hemorrhage comes on. In acute symptomatic or non-symptomatic variety, indications for treatment are not so definite. It may be difficult, even at autopsy, to determine its cause. After single acute hemorrhages of either the symptomatic or non-symptomatic variety, medical treatment is usually advocated and instituted. It must be remembered, however, that the amount of blood vomited is no indication of the amount of hemorrhage, as considerable may pass into the bowels. The majority of acute single hemorrhages are capillary oozings, and many cease as spontaneously as they begin; hence, palliative treatment is indicated. After acute multiple hemorrhages the question of surgical intervention comes in. Drawbacks to operations at this time are (1) the patient is in poor condition to go through a major operation, and (2) that cases do recover after repeated profuse attacks of hematemesis under palliative measures. The author sums up by saying that it may be stated as a general proposition that after three or more hemorrhages, surgery should be resorted to. As to the proper line of treatment to be instituted after a second acute hematemesis, there can be found a great diversity of views. In general, the greater number of operators have, up to the present time, advocated a waiting policy, and a building up medical treatment, in the hope that the hemorrhages would not be repeated.—*New York Medical Journal*, March 25, 1905.

WILLIAM F. BAKER, A. M., M. D.

ROOF GARDENS ON CITY PRIVATE HOUSES.—Some suggestions (with illustrations) are made by W. P. Northrup in regard to the utilization of the roofs of ordinary private houses. Children often droop in the city because they cannot really live in the open air, as do country children. In town they may go in the park, but they must be dressed for it, the nurse must dress herself, and by the time they are all ready to go, the children may be too warm for their wraps. They are subjected to many street dangers in their outing, rarely remain out more than two hours, and often return home tired, and jaded. Northrup describes the results obtained in the case of one family, the proper methods for getting the roofs ready, and various amusements which children may properly enter into under the conditions noted. The total expense of roof preparation in this special instance was about one hundred and fifty dollars. Wise nurses are required, and some moral courage on the part of the parents.

THE PURPOSE OF EYE-GLASSES.—The conclusions of E. M. Alger are as

follows: (1) Improvement of sight is only one function of glasses. (2) Relief of eyestrain is fully as important. (3) Eyestrain is often responsible for headache and other reflex nerve phenomena. (4) One may have perfect vision and still be subject to eyestrain. (5) Small errors of refraction often cause more strain than large ones, since there is a more constant effort to overcome them. (6) Strain can generally be relieved by properly fitted glasses. (7) Glasses which give the best vision may simply increase the strain, and therefore the patient cannot safely select his own glasses; as, furthermore, he will not buy of an optician glasses which do not improve vision, he very seldom gets the correct glass, and, therefore, fails of relief.—*Medical News*, March 25, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE PHYSIOLOGICAL DIFFERENTIATION OF PNEUMOCOCCUS AND STREPTOCOCCUS.—It is impossible by current cultural methods and by morphological examinations, to clearly differentiate between pneumococci and streptococci.—P. H. Hiss, Jr. Well-marked capsules may occur in organisms which have with reason been classified as streptococci. The author's experiments show well-marked differences between the metabolic activities of pneumococci and streptococci, which may prove useful in the differentiation of these organisms. These differences become apparent when the pneumococci and streptococci are cultivated in an alkaline serum medium or in a serum medium to which the carbohydrate—inulin has been added. Pneumococci produce acid in the alkaline serum. They ferment the inulin and thus rapidly give rise to acid. Streptococci do not form appreciable acid in either of these media, nor do they ferment the inulin. The pneumococci coagulate the serum of these media, while the streptococci do not. Starch and glycogen media are coagulated by pneumococci and by some at least of the streptococci. Lactose, saccharose, and maltose are fermented by pneumococci with the production of acid. Certain members of the *Streptococcus pyogenes* also ferment these disaccharids. In serum media, especially starch-bouillon serum, sterilized at 68 degrees C., pneumococci usually develop well-marked capsules. In some of the serum media streptococci have been found to possess capsules. The same stains are applicable to the demonstration of pneumococci capsules.—*Journal of Experimental Medicine*, February 4, 1905.

WILLIAM F. BAKER, A. M., M. D.

IMMUNITY AGAINST CHOLERA.—Strong has been endeavoring to produce a new prophylactic against cholera. Acting on the suppositions that (1) the cholera toxin exists as an integral part of the bacteria cell; and (2) it is set free after the death of the organism, and probably partly through the action of its own proteolytic enzyme, which is not destroyed at 60 degrees C., he determined to find out whether the other immunizing substances (agglutinine and bacteriolysine) as well as the toxin could be separated from the bodies of the bacteria by a process of auto-lytic digestion. He therefore took strains of cholera vibres known to possess good peptonizing powers, placed them in an aqueous solution, carefully killed them by heat, and digested them at 37 degrees. He found that the receptors became separated off from the bacterial cells, and might be filtered off in

solution. The injection of these free receptors into both man and animals resulted in the production of highly bactericidal and agglutinative blood serums. The antitoxic value of these serums was, however, only moderate. The subcutaneous injection into man of free receptors obtained in this way was not attended with any danger, produced practically no local disturbance, and caused only a slight general reaction. Hence Strong considers his method is a practical one for producing a cholera-immune-serum in man, and thinks it is highly desirable that his cholera prophylactic should be given a thorough practical test.—*Publications of the American Bureau of Government Laboratories*, No. 16.

WILLIAM F. BAKER, A. M., M. D.

LOBAR PNEUMONIA IN INFANCY.—J. L. Morse believes that pneumonia is far more common during the first two years of life than is generally supposed. Its course and prognosis differ materially from the descriptions given in many of the older as well as in some of the newer textbooks. The onset is less stormy than is usually described. A chill practically never occurs; convulsions are very unusual. Cough rarely amounts to much in the beginning. High fever usually develops rapidly, and is generally accompanied by drowsiness and apathy. The most common period of pyrexia is seven days. A shorter duration is more common in infancy than later. The average duration is longer in fatal cases. Remissions of even as much as 3 degrees or 5 degrees are not uncommon. Crisis is less common than later. Lysis occurs especially in the cases of long duration. Collapse during the crisis is less frequent than is usually taught. The usual pulse-rate is between 150 to 170, being over 150 in 75 per cent. of cases. The usual respiratory rate is between 55 and 80. It is more often above 80 than below 55. The rate of respiration is always increased out of proportion to that of the pulse. This change in the pulse-respiration ratio is important in diagnosis. Cough is seldom a prominent symptom. Gastro-intestinal symptoms are very common and very important. Marked anorexia is the rule. Vomiting is not very common. Diarrhœa is more common than constipation. Distention of the abdomen is frequent, difficult to relieve, and often hastens the fatal termination. The urine shows the evidence of acute degeneration and occasionally of acute inflammation of the kidneys. The usual mental condition is one of drowsiness or apathy. Cerebral symptoms frequently associated with a high temperature. The nervous symptoms are often due to a complicating inflammation of the middle ear. The diminution of the respiratory sound on the affected side is often the earliest sign, and is of great importance in diagnosis. The order of frequency in which the lobes are affected is left lower, right upper, right lower, and left upper. There is no relation between the mortality and the part of the lung involved. The mortality varied directly with the amount of lung involved. Acute inflammation of the middle ear is the most common complication. The pneumonia mortality in the infant's hospital series was 25 per cent. This is higher than that in private practice. The younger the infant the worse the prognosis. The prognosis varies with the amount and not with the lung involved. Fever lasting more than nine days is of serious import. The prognosis is good when the temperature is not over 103 degrees F.; it is serious when over 106 F. Variations between these two points are unimportant. The prognosis is good when

the pulse is not over 140 or the respiration over 55. The amount of the increase above these limits is of little importance. The gastro-intestinal are the most dangerous of the more common complications. The treatment is hygienic and supportive rather than medicinal. Far more harm can be done by overmedication than by undermedication. The infant should not be disturbed. It must have the greatest possible amount of fresh, cool air. The diet must be regulated to suit the weakened digestion and food forced if necessary. Stimulation should be used when indicated, and not as a routine measure. Strychnine is most useful, alcohol next. The fever should not be treated unless it causes marked nervous symptoms or depression. It should then be treated by cold externally and not by coal-tar antipyretics internally. Cold must be used cautiously, as infants bear it badly. Fan baths and cold packs are best borne. Local applications should be used only for pain, oxygen for cyanosis. Creosote, the various serums and other "specifics" have no effect on the course of the disease.—*American Med.*, January 28. 1905.

WILLIAM F. BAKER, A. M., M. D.

ACUTE ASCENDING PARALYSIS IN CASES OF CHRONIC CYSTITIS.—Three cases have come under the observation of T. J. Walker, who gives their clinical histories. All were characterized by a sudden invasion, rapid course and fatal termination. The exact cause of this terminal complication is unknown. Various theories are passed in review. The consensus of opinion inclines to Leyden's view of a urinary paraplegia, though there is a possibility of the condition being a reflex paralysis. No bacteriological investigations have been made. Landry's paralysis is generally regarded as an intoxication of the nervous centers due to infection by specific microbes and that urinary paraplegia is the result of the spreading from the urinary organs to the lumbar portion of the cord of a specific inflammation. The author thinks there are grounds to justify a probable explanation of the pathology of the cases to which he directs attention. In every infection three factors are necessary: (1) The presence of microbes having active infective powers; (2) a medium in which these microbes, when conveyed to it, can develop; (3) the resistant power of the tissues must be weakened. He suggests as a provisional view that in his cases three factors existed. First, the specific microbes were to be found in the urinary organs, probably in the bladder; secondly, at a certain stage of the disease they were conveyed along the same course, almost certainly the nerves, by which inflammation spreads from the urinary organs in paraplegia urinaria to the cord, in which medium they developed rapidly, producing a virulent intoxication; and thirdly, the tissues were weakened by the long-standing cystitis.—*The Lancet*, March 11, 1905.

WILLIAM F. BAKER, A. M., M. D.

A METHOD OF EXTENSION OF THE "GRILIRON" OPERATION FOR APPENDICITIS WITHOUT DIVIDING THE MUSCULAR FIBERS.—The method described by M. P. Holt consists in the separation by the touch of a knife of the tendon of the external oblique muscles from that of the internal oblique, where these begin to blend together for the information of the sheath of the rectus, to well beyond the outer edge of the rectus and then retract

inwards; the line of splitting of the internal oblique and transversalis muscle is then carried on through their tendons well on to the rectus sheath for an inch or so; the remaining part of the anterior sheath of the rectus is then divided upwards, or downwards, whichever be desired, as far as is necessary; the rectus is then displaced inwards and the posterior sheath is similarly divided downwards (or outwards and upwards) as the case may be. The incision in the peritoneum is easily extended to any desired point in the line of original incision and very free access is obtained. This method takes few minutes, but its chief advantages are only obvious when the layers are severally united by sutures. When the posterior sheath of the rectus has been sutured, the rectus muscle secured by a few points in its original bed, and the anterior sheath similarly united, the internal oblique and the transversalis muscles will be found accurately lying together in the line in which they were split; the external oblique, of course, comes together without the least difficulty. In this way there has been no division of muscle fibers and the nerve and blood supplies to the rectus are practically untouched.—*The Lancet*, March 11, 1905.

WILLIAM F. BAKER, A. M., M. D.

GLAUCOMA AND THE GLAUCOMA THEORIES.—Patterson gives an interesting exposition of the present views upon this subject. The source of the aqueous humor is to be found in the epithelium of the ciliary region. Leber describes the secretion of the aqueous as a transudation of filtration process, depending upon a difference of pressure between the blood in vessels and the fluids in the chambers of the eye. Doubtless, however, the epithelial cells play more than a passing or mechanical role. No direct nervous mechanism has been demonstrated. It acting indirectly through the vasomotor pressure, and consequently the amount and character of the secretion may be greatly modified. Normal aqueous strongly resembles normal saline solution. After puncture of the anterior chamber, it contains much albumin and fibrin and is spontaneously coagulable.

Almost the only path for the elimination of fluid from the eye, at least in man, is the filtration angle. In addition, there is probably some absorption of fluid by the vessels of the iris and a slow passage from the vitreous by the optic nerve. Schlemm's canal is a venous rather than a lymph sinus. It often contains blood corpuscles. It communicates by the minutest pores with the anterior chamber; the anterior ciliary veins have direct communication with it, so that fluid from the anterior chamber passes directly into the veins of the sclerocorneal margin.

The fluid contents of the eyeball stand at a pressure midway between the arteriocalillary and venous blood pressures. It equals about 25 mm. Hg.; physiological variations from this standard are possible only in a very limited range. The tension is the same in the aqueous and vitreous chambers. This is not altered by accommodation. The intraocular tension can never exceed the blood pressure in the ciliary arteries, 90 to 110 mm. Hg. The blood pressure in the capillaries of the ciliary region has been estimated at about 50 mm. Hg.; that in the veinlets into which the fluid filters about from the anterior chamber at about 10 to 15 mm. Hg. Mydriatics and myotics have no influence on the tension of the normal eye. Increase and diminution of the blood pressure have a corresponding effect

respectively upon the intraocular tension. Division of the sympathetic appears to cause some transient diminution of tension.

Glaucoma. Attempts at producing glaucoma in animals have usually succeeded but imperfectly. The most successful was Bentzen, in Leber's laboratory, who produced permanent increased tension by wounding the tissues at the filtration angle, which caused adhesions, shutting off the angle. In secondary glaucoma, an evident mechanical obstruction can usually be demonstrated giving rise to retention—*e. g.*, fragments of lens matter in traumatic cataract, blocking the spaces of Fontana, etc.

In primary glaucoma these mechanical explanations no longer suffice. A great obstacle in the way of investigation is the difficulty of obtaining glaucomatous eyes for examination in the earlier stages of the disease, of which very few cases have been published. The later lesions are (1) cupping of the disk with accompanying optic atrophy, (2) closure of the filtration angle, (3) degenerative changes in the intraocular blood vessels. Most of the glaucoma theories stand in close relation to 2 or 3. The older views of glaucoma associated with the name of von Graefe and Donders were based on the idea of hypersecretion. These views have been largely abandoned. A new conception of glaucoma was introduced by Knies. This regards the increased tension as caused by retention due to adhesions of the root of the iris to the cornea, blocking the filtration angle. Weber explained this by forward pressure of the swollen ciliary processes. While the angle is undoubtedly frequently blocked, most observers no longer regard this as a primary lesion, having been found absent in certain glaucomatous eyes examined in the early stage. Czermak and Birnbacker have laid special stress on the diseases of the vertex veins, endophlebitis and periphlebitis, but this does not appear to be constant. Priestly Smith brought forward a theory which considers the circumlental space as becoming narrowed, especially in hypermetropic eyes, from the growth of the lens. There are many difficulties in the way of accepting this. Panas appears to favor a modified secretion theory due to changes in the nerves and blood vessels. Abadies' idea that glaucoma is due to disease of the sympathetic has not found much favor.

The author, like most observers, favors a retention theory. One great point in its favor is the well-known fact that glaucomatous eyes remain hard for a long time after enucleation. There is practically no outflow from such eyes. The extreme shallowness of the anterior chamber in glaucoma has never been satisfactorily explained. Injection of fluid into the vitreous in animals' eyes causes very little shallowing of the anterior chamber. In eyes liable to acute glaucoma a very shallow anterior chamber is the rule. With the blocking of the filtration angle, there is probably an advance of the root of the iris and anterior part of the ciliary body, which further increases the shallowness of the anterior chamber.

In explaining the more chronic forms of glaucoma, the writer would lay most stress on changes in the vascular systems both general and local. Signs of vascular degeneration, both local and general, are most marked in the variety which occurs in association with retinal hemorrhage. Being characteristically a disease of advanced life, its relation to changes in the vascular system seems especially noteworthy. Zimmerman, in a recent paper, expresses the view that glaucoma depends on a reduction of arterial

blood pressure leading to nutritive changes, transudation, etc.; but experiment and clinical evidence seem alike opposed to this opinion. In fact, the writer believes that such patients present an increased rather than a lower arterial pressure.

It does not seem worth while to study further the changes in glaucomatous eyes unless the examination be made in the earlier stages, perhaps such opportunities might be found in animals, as the disease is said to occur frequently in aged dogs kept under highly artificial conditions.—*Scottish Medical and Surgical Journal*, July, 1904.

WILLIAM F. BAKER, A. M., M. D.

HYPERTROPHY AND STENOSIS OF THE PYLORUS IN INFANTS.—Clinically and pathologically all reported cases of hypertrophy and stenosis of the pylorus in infants may be divided into three groups:

1. Those that attain an age beyond early infancy, present throughout their lives more or less symptoms of obstruction, and later seek operative relief. Here the stenosis must necessarily be of a moderate degree, i. e., the lumen measuring from 5 m.m. upward.
2. Those infants that present for a few weeks similar symptoms, which, however, gradually yield to appropriate diet and medicines.
3. Those babies that either are promptly relieved of an almost total obstruction by surgical measures or die within a few weeks of simple inanition.

The third type forms the body of a paper by F. L. Wachenheim, in which he reports a case of his own.

The cause of the obstruction has not yet been definitely decided upon. Some authors consider it to be due to a spasm of the pylorus, and some cases seem to make this theory plausible; others that it is almost wholly an anatomical lesion, consisting of an overgrowth of the muscular and submucous coats of the pylorus. While the prevailing opinion seems to be that either condition may be present, and sometimes a combination of both of them.

The prognosis differs greatly, according to which condition is present, and a differentiation between them, if one can be made, is of the utmost importance in the treatment.

In many cases the diagnosis is not easy; in summer the possible combination of pyloric stricture with a digestive disturbance will always prove puzzling, especially when the previous history may be unreliable. The keynote is the combination of obstinate vomiting, equally obstinate constipation, and gradual loss of weight; an important point in the vomiting is its violence and close dependence on the ingestion of food, the quality of which is almost immaterial; meanwhile the appetite is ravenous. Palpation of the pylorus is an uncertain symptom, and is frequently rendered difficult or impossible by the almost constant crying of the infant, with resulting tension of the abdominal parietes. Peristalsis and dilatation were visible usually only when the stomach was well filled, and in many cases not at all. In the reports of thirty-five fatal cases studied by the author, the average age at onset was two weeks, before which time the infant was

apparently normal; and the average age at death was nine and a half weeks.

The method of treatment depends upon the cause of the obstruction. As it is impossible, in a particular case, to determine at once whether mere spasm or organic obstruction is playing the chief role; and since operative intervention entails a high proportionate mortality, it would appear best to begin by assuming the presence of the milder condition, from which recovery is the rule, and treat the patient accordingly.

The author recommends the giving of Carlsbad (Mühlbrunnen) water in addition to the usual diet, i. e., breast milk, and later on whole milk; lavage of the stomach; and frequent meals of highly diluted albumin water and barley water. If the infant does not begin to gain in strength and especially in weight by the end of two weeks, surgery offers the only chance. The principal surgical procedures, gastro-enterostomy and pyloroplasty seem to show about equally good results.—(*The American Journal of the Medical Sciences*, April, 1905.)

J. D. ELLIOTT, M. D.

AUTOMATIC FLUSHING OF THE STOMACH IN CERTAIN CASES OF VOMITING.—In abdominal conditions operative or non-operative, which cause severe vomiting of dark, offensive matter, accompanied by great thirst and exhaustion, William H. Bennett recommends automatic flushing of the stomach by allowing the patient to drink as much cold or tepid water as he desires. As a result, the vomited matter soon becomes clear and loses its offensiveness, the thirst disappears, and the water regurgitates without straining or effort, thereby greatly lessening the exhaustion. In cases which recover, the vomiting gradually decreases until it ceases and normal peristalsis is re-established. While in fatal cases the suffering is much relieved. Four cases are cited. One was fatal, but the author attributes the recoveries in the other cases directly to this plan of treatment.—(*The Lancet*, July 8, 1905.)

J. D. ELLIOTT, M. D.

GNORRHEAL ARTHRITIS.—H. W. Frauenthal, from an experience of two hundred and fifty-two cases, mentions the following as some of the characteristic symptoms of gonorrheal arthritis: The characteristic intense pain and its increased severity at night; the peculiar outline of the joint, as it is more often complicated with inflammation of the tendon sheaths and bursal than in articular rheumatism and other forms of arthritis; and the association of some acute or chronic gonorrheal infection. The leucocyte count may aid in the differential diagnosis, and X-rays showing the ligaments and tendons, are also of great value.

He outlines the treatment as follows: In the acute stage iodine should be painted over the joint, ice bags applied, a fixation splint to immobilize the joint, with sufficient morphine to appease the pain. Cautery over the joint relieves the pain; also the high frequency current. As a last resort arthrotomy may be employed.

In the sub-acute and chronic stage the use of blue ointment, crédé ointment and liquid iodi comp., combined with dry heat and galvanic electricity

are of great value. All joints should be put at rest in plaster, as this makes the most easily applied and most perfect fitting splint for all joints except the hip, which requires a Thomas or Sayre traction splint. In the phlegmonous joint, extension and counter-extension should be used.—(*Medical News*, May 13, 1905.)

J. D. ELLIOTT, M. D.

SARCOMA OF THE STOMACH.—Harlow reports three cases of sarcoma of the stomach found at post-mortem. In two of them clinical diagnosis of malignant disease of the stomach had been made, and in one of them an exploratory laparotomy had been performed, but the growth was too extensive for a radical operation.

Harlow believes that more primary gastric sarcoma would be found if a microscopical examination were made in every case of stomach neoplasm. In twelve hundred consecutive autopsies, he discovered four.

Sarcoma shows less tendency to involvement of the gastric mucous and more toward infiltration of the muscular walls than carcinoma. And metastases seem to be less frequently formed and of later appearance, and the course of the disease is longer than usual in carcinoma.

From these facts surgery appears to have a more hopeful outlook in sarcoma than in carcinoma of the stomach.—(*Medical News*, July 15, 1905.)

J. D. ELLIOTT, M. D.

BLINDNESS FOLLOWING PARAFFIN INJECTION.—The dangers of paraffin injection are venous thrombosis and arterial embolism, from pricking or occlusive pressure of one or more veins or from pricking a small artery. One-third of a grain of 43° paraffin, half of it on each side of nose bridge, about 1-2 cm. from the tip, was followed in three minutes by pain and soon total blindness of the left eye; evidently a thrombosis of the external vein spread by continuity to the territory of the inferior ophthalmic vein, then as it spread toward the optic foramen, thrombosis of the central retinal vein, the main trunk of the ophthalmic and the cavernous plexus occurred. In this case there were no technical mistakes in the making of the injection.—*The Homœopathic Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

SENILE CATARACT TREATED WITH CAUSTICUM 30.—Mr. H., aged 68, complained of failing sight, "as if a brown spot was constantly before the eyes." Reading was becoming more and more difficult. Bright light caused unpleasant glare. General health good. Inspection of the lense showed marked cortical haziness in the form of spicules and patches, with some fairly clear lens intervening. Right lens more involved.

O. D. 15-100 No improvement with lenses.

O. S. 15-50. Causticum 30 was prescribed.

After six weeks treatment, the eyes showed vision O. D. 15-40—75 ax 180°=15-20. O. S. 15-30. No. Hm.

WILLIAM SPENCER, M. D.

Although the disintegrated lens fibres were not restored, the intervening

substance was absolutely clear and the fundus could be clearly defined.—*The Homœopath. Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M. D.

A WARNING AGAINST THE USE OF ADRENALIN IN GLAUCOMA.—The author reports two cases of glaucoma in which the use of adrenalin 1-1000 was immediately followed by disastrous results. In one case the adrenalin was used alone, and in the other in combination with eserine. In both cases the pupil rapidly dilated, and the tension became markedly increased. He suggests that in these cases, the contraction of the anterior ciliary veins, which was the immediate effect of the adrenalin, lessened the outflow of the intraocular secretions, and stimulation of the dilator fibres of the iris produced the wide mydriasis with its necessary consequences. The later effects of adrenalin are to contract the ciliary body and thus limit secretion. He sounds a warning against the use of adrenalin in acute inflammatory, sub-acute and chronic glaucoma until after eserine has been used with positive results.—*A. Senn, Annals of Ophthalm.*

WILLIAM SPENCER, M. D.

THE CAUSE OF TRAUMATIC POSTERIOR POLAR CATARACT.—Weiss reports a case of posterior cataract following a traumatism. Such cases are rare, and the mechanism of their production is not definitely known. The patient was a man, who one-half hour before presentation had been struck in the eye with a piece of iron. The splinter of iron was sticking in the cornea, which it had perforated, wounding the iris, but not injuring the lens capsule. The splinter was removed, and three days later examination revealed the following: Corneal wound closed; anterior lens capsule absolutely clear and uninjured; posterior capsule in its outer half clouded. The area of opacity was made up of a great number of fine pigmented points evenly distributed and resembling sand. The opacity was sharply defined at its inner border by a concave line. To the temporal side it passed under the iris toward the equator. The opacity subsequently cleared, the inner boundary line remaining. The interesting points are: The development of the opacity without any visible injury to the lens capsule; the peculiar location of the opacity and its pigmentation. The cause of the pigmentation Weiss cannot explain. The iron remained in the eye for too short a time to have caused it; free pigment from the iris is unusually rare following an injury of this kind; this and the absence of all inflammatory signs would seem to exclude precipitation from the iris.—*E. Weiss Annals of Ophthalm.*

WILLIAM SPENCER, M. D.

ASTHENOPIA—EYESTRAIN.—The author discusses the definition and application of the word eyestrain as used in English and American literature, and in German literature. In Germany, the subject is considered not from the standpoint of the eyestrain, but from the consequences of eyestrain. As there are frequently exhaustion and weakness, the word asthenopia would seem to better define the condition. Reference is made to a recent article by Dand upon "Eye-strain and the Psychoses." In this article the term eyestrain is used in two classes of affections. In the first, there is an

automatic excess of work (strain) put upon the midbrain, or oculo-motor nerves, due to refraction, accommodation, or muscle-anomalies. This is genuine eyestrain, not involving the higher centres. In most cases it is sub-cortical, and is a kind of "spinal eyestrain." In the second class, all cases in which the eye is seriously damaged, or the receptive centres in the brain are exhausted. The cortical centres are then involved. This kind of eyestrain is really more of a "brain-strain."

He believes it very improbable that eyestrain is an important and direct factor in the production of even the minor psychoses, but that it does modify the symptoms very much, and secondarily greatly increases the disturbances.

In hysteria, for example, paralysis of the ciliary muscle can cause micropsia, spasm can cause macropsia, and certain disturbances of the accommodation can even cause polyopia.

Altogether "eyestrain" is used to explain so many conditions, some of them so totally different and far removed, that he believes the word asthenopia, which means "weakness," is in every case preferable.—*Ohlemann, Wiesbaden, Annals of Ophthalmal.*

WILLIAM SPENCER, M. D.

A CASE OF PRIMARY ABDOMINAL PREGNANCY.—*Linck* believes to have encountered such a case. After pointing out the difficulties which stand in the way of accepting as genuine a number of former cases reported as primary abdominal pregnancy, he reports an observation of his own which concerns a 39 year old woman. In September she was normally delivered. In December the menses again appeared. In January she was twice unwell, and again in February and March. In April, while in good health the woman was suddenly taken with severe pains in the abdomen. In a few days these were repeated in association with fainting and the usual symptoms of internal hemorrhage. At the abdominal section a quantity of fluid blood was found in the abdomen, and also a round cavity or sac formed only of peritoneum, having a small opening and filled with coagula. After cleaning out the latter, a small semisolid, whitish yellow mass was found in the cul-de-sac of Douglas, which was removed along with a layer of peritoneum. No evidence of fetal remains appeared. The uterus, tubes and ovaries were normally located and absolutely unchanged. On microscopic examination of the small mass, its structure was found to be composed of chorionic villi which also entered the peritoneum of the cul-de-sac. Since no evidence of a genital pregnancy existed the author feels justified in regarding this as a case of primary abdominal pregnancy.—*Monatsschr. f. Geb. u. Gyn.* Vol. xx, 1257.

THEODORE J. GRAMM, M. D.

ADHERENT PLACENTA.—*Bauereisen* has lucidly presented this subject. In former years a retention of the afterbirth was looked upon as an adherent placenta. At that time the serious intervention of introducing the hand into the uterus was done altogether too frequently, but later when an adherence of the placenta was entirely denied, this manual procedure was criticized. The debate which was carried on since about 1880 has lately been decided in favor of the waiting method in conjunction with

Crede's manual expression. And yet adherence of the placenta does occur, but much more rarely than was formerly supposed. Simpson was the first who attempted an explanation of this occurrence. He believed that it was caused by an inflammation either of the placenta primarily, or of an extension from the uterus to the placenta. From organization of the inflammatory exudate, adhesions were thought to form which became firmer the longer the process continued. Subsequent authors accepted this view more or less completely. Hegar believed that placental hemorrhage in the early months led either to abortion at once, or this failing to placental adhesions. Martin, Cohenstein and others regarded endometritis, particularly of the interstitial variety, as the cause. Langhans, who studied the question from a histological standpoint, attributed the occurrence to a defective development of the glandular or spongy layer, which having grown too firm, did not permit easy separation along this usual plane of cleavage. Leopold and Leisse were the first to study the histological conditions present in a portion of the placenta still attached to the uterus. They found that the decidua serotina had largely disappeared and was replaced by connective tissue, and the chorionic villi entered this dense structure which lay closely approximated to the muscular layer. This connective tissue change was attributed to endometritis. Neumann examined a case in the same way and found the serotina entirely absent and the villi entering the uterine muscle. Several authors have made the same observation. So did Meyer-Ruegg in a case which had previously had a septic endometritis. Finally Veit has proposed another explanation, suggested originally by his studies in ectopic gestation. He found that the villi grow too deeply into the uterine muscle and particularly into the maternal vessels, especially the veins, and portions of the villi may even be torn off.

The author then relates the case of a woman who in several previous labors had experienced increasing difficulties during the placental stage, until at the sixth delivery she succumbed to secondary hemorrhage on the twelfth day post partum, after having been rescued by heroic means at the time of her delivery. Specimens from this case were carefully examined and show that the characteristic condition in adherent placenta consists in the villi lying in direct contact with the muscle, and in a penetration of the maternal veins by the villi.—*Zeitschr. f. Geb. u. Gyn.* Vol. 53, 310.

THEODORE J. GRAMM, M. D.

THE POISON OF ECLAMPSIA.—Those of us who have been watching the earnest efforts made to discover the essential cause of eclampsia, a subject which has heretofore eluded every endeavor to apply a rational explanation, will take considerable interest in a preliminary communication by Dienst, concerning some experiments which he has conducted along these lines. He has examined a large number of placentas from both normal and eclamptic cases. These he injected along the umbilical vessels with milk and with solutions of methylene blue. In some instances the placenta was still *in situ* within the uterus. He believes that these procedures have shown, especially because of the pigment appearing in the mother's urine, that in eclampsia there exists a direct communication between the fetal and the maternal circulation. He also tried to determine whether the blood of the mother showed agglutinins and haemolysins to the blood of other mothers and children, and whether in some cases the maternal

blood agglutinated the blood of her child or even dissolved the same. In 15 cases where the placenta was impermeable, the mothers remained well, while of 9 cases with permeable placenta and whose blood reacted upon the fetal blood like that from another species, 7 had eclampsia and 2 had albuminuria. He suggests, with some reserve, that eclampsia and albuminuria may occur when the fetal and maternal blood act toward each other like the blood of distinct species, and when a communication exists between their circulatory systems.

Certain other facts bear upon this question. For instance, it has been shown by Schmorl that placental cells were more regularly and in greater numbers found in the lungs of eclamptics, than in those dying from other causes than eclampsia. There is a striking analogy between the symptoms in eclampsia and those produced in animals by transfusing them with the blood from another species; moreover the histological changes produced in such animals are quite similar. The occurrence of haemoglobin in the urine of eclamptics is probably also a demonstration that an abundant disintegration of red blood corpuscles occurs. The author's blood examinations with agglutinin and haemolysin also seem to confirm his theory.—*Zentralbl. f. Gyn.* 1905, 353.

THEODORE J. GRAMM, M. D.

A CRITICISM OF DIENST'S ECLAMPSIA THEORY.—Leipmann has started the criticism to which the theory of Dienst is sure to be subjected. He believes that injecting the placenta with milk is attended by so many possibilities of causing placental lesions, that this procedure cannot be relied upon for proof of the communication between the maternal and fetal circulations. Of the injection of methylene blue solutions he says that this substance possesses such remarkable diffusible powers that the results obtained may be due to this property, as appears probable from the results of two investigators. He also objects to Dienst saying the maternal and fetal blood act toward each other like the blood of different species; claiming it has been shown that they only react to each other like the blood of different individuals. Leipmann also says the haemolysins found in the maternal body in consequence of previous disease could only be autolysins now alleged to act upon the fetal blood, which he denies. He was not able to confirm other blood experiments made by Dienst. He also criticizes Dienst for quoting Landois, whose writings were published at a time when nothing was known of haemolysis and agglutination as at present understood.—*Zentralbl. f. Gyn.* 1905, 481.

THEODORE J. GRAMM, M. D.

THE INCREASE OF HAEMAGGLUTININ DURING THE PUERPERIUM.—Schenk says while not intending to fully review the eclampsia theory of Dienst, he desires to redirect attention to some work previously done by himself. He has shown that during the puerperium in normal cases there is an increased formation of isoagglutinin, but has not found haemolysins and isolysins. If this is true in eclampsia, it would strengthen the hypothesis of Dienst. He has examined the serum of pregnant women and found the power of agglutination constant; if the increase of haemagglutinin is dependent upon similar causes, such as the transfusion of heterogeneous fetal blood into the maternal circulation, as is the case with haemolysins and isolysins, then there must also in normal pregnancies, in which surely

there is a transfer of fetal to maternal blood, at least sometimes be demonstrable an increase of agglutinin. The fact that this occurs first during the puerperium speaks for the assumption that the physiological involution and resorption of tissue, as occurs during the puerperium, must be regarded as the cause of the increase of agglutinins.—*Zentralbl. f. Gyn.* 1905, 551.

THEODORE J. GRAMM, M. D.

THE TRANSFER OF TOXINS FROM THE MOTHER TO THE FETUS.—Schmid-lechner says the passage of toxins from the mother to the fetus is an unknown chapter in the physiology of the placenta. At first sight the question seems to be a purely scientific one; when, however, we consider what dangers threaten the fetus in infectious diseases of the mother, the great practical value of the question appears. Heretofore abortion under such circumstances has been referred to as a complication of the disease. That toxins pass from the mother to the fetus has been suggested by some authors, especially since in cases of variola of the mother, the aborted fetus showed the typical variola exanthem. Thus far the transport from the mother to the fetus has been demonstrated of chloroform, carbonic acid, quinine, phloridzin, salicylic acid, potassium ferrocyanid, rose anilin, strychnia, strophanthin, benzoic acid, potassium iodid, and morphia. Experiments with granular substances like cinnabar and ultra-marine have not given uniform results. So also are the results with bacteria contradictory, although a number of experimenters claim to have been successful in their tests with several micro-organisms. The endeavor has been made to prove the transmigration of bacteria and of toxins upon a purely clinical basis, and this has been successful in variola, and in six cases of scarlatina and measles; but while intermittent fever, erysipelas and the factors of puerperal infection rarely cause the death of the fetus, yet cases are recorded in which intrauterine infection has caused the death of the fetus. Vaccination of the mother during various stages of pregnancy has shown that it is not possible to immunize the child by this procedure.

The object of the author's experiments was to determine what influence the toxins have upon the fetus; whether the poison passes over to the fetus in diseases of the mother, and if so, what changes it produces in the fetus. For this purpose he used the diphtheria toxin, so that the action of its bacteria could be entirely excluded. The poison of diphtheria was selected because of its easy production, its stability, and because of the characteristic changes produced. The experiments were conducted mostly with guinea pigs. The conclusions reached are as follows: In intoxication of a pregnant animal a portion of the toxins passes over into the blood of the fetus and causes there the same changes as in the mother. The intensity of the changes depends upon the amount of the toxins in the blood of the mother. The changes develop more rapidly and more intensely in the fetus than in the mother. The transfer of the toxins from the maternal circulation to that of the fetus can only take place in the placenta. A very short time only is required for this transfer. An excess of poison introduced into the fetal circulation remains there unchanged for a time; if this fetal blood be introduced into another animal it produces the same changes as in the poisoned animal and its fetus.—*Zeitschr. f. geb. u Gyn.* Vol. 52-377.

THEODORE J. GRAMM, M. D.

RAPID DILATATION OF THE UTERUS BY MEANS OF BOSSI'S DILATOR.—In an extensive article on this subject, *Ehrlich* reports in detail the results obtained in 47 cases. Thirty-one cases of eclampsia were treated and a favorable termination obtained in all but six unusually severe cases. The author believes the use of the Bossi dilator to be almost specific treatment in eclampsia. The remaining cases included five cases indicating beginning infection; two cases of tetanus uteri; two cases of phthisis pulmonum; six cases of cessation of labor from contracted pelvis, and two cases of threatened danger to the child. The author thinks the instrument may be advantageously employed in premature separation of the normally placed placenta, and in Caesarian section upon the dying. In placenta praevia he does not favor the complete dilatation. The method of using the instrument is quite different when the cervix has disappeared and when still present; under the latter conditions it was only applied in six cases. In 75 per cent. of the cases lacerations were absent or but slight, in 21 per cent. moderate and in only 4 per cent. were they more extensive. These favorable results, together with having had no serious post-partum complications, induces the author to regard this operative measure with much favor.—*Arch. f. Gyn.* Vol. 73, 439.

THEODORE J. GRAMM, M. D.

SARCOMA AND CARCINOMA COEXISTING IN THE UTERUS.—*Nebesky* reports the case of a patient operated by adominal hysterectomy and extirpation of the left mamma. In the breast three cancerous nodules were found. The mucous membrane of the uterus had undergone carcinomatous degeneration, and in the fundus there was a sarcomatous mucous polyp. Microscopic sections prepared from tissue near the base of the latter exhibited carcinoma and giant celled sarcoma. The author refers to a similar case by *Opitz*, and assumes that the same unknown irritant produced the carcinomatous as well as the sarcomatous degeneration.—*Arch. f. Gyn.* Vol. 73, 653.

THEODORE J. GRAMM, M. D.

THE SERUM TREATMENT OF PUERPERAL FEVER.—*Pcham* reports the results obtained in Chrobak's clinic with the serum treatment in 44 cases of puerperal fever. He concludes as follows:

1. Puerperal diseases induced by streptococcus infection appear to be influenced by Paltauf's serum.
2. Experiments show that the favorable action depends upon the earliest possible use of relatively large doses of serum.
3. After long continuance of the disease and when organic lesions have arisen, the serum is useless; it appears also that the further development of localized infection (metastatic abscesses) cannot always be prevented.
4. An injurious effect of the serum, even in those cases not caused by streptococci, was not observed.—*Arch. f. Gyn.* Vol. 74, 47.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

ANTIDOTAL TREATMENT.—When we read Dr. Downes short article upon this topic, in *Chironian*, we thought, at first, that he was recommending the administration of the homœopathic remedy bearing a dynamic antidotal relation to the symptoms produced by improper and excessive use of crude drugs. But, the case of malarial infection, given as an illustration of his method, would seem to indicate that he is recommending a high-potency isopathy. However, the results are interesting and worthy of investigation. This man came from Texas to be cured of malaria. He had received too much mercury and quinine, it is stated. A good homœopathic physician tried the usual plan of prescribing, without meeting with success. His liver and spleen were each enlarged. Dr. Downes gave this patient, at first, *Mercurius*, *one-thousandth*, then he prescribed *Quinine*, *one-thousandth*; and finally, *Malaria* *30x*. Thus the drug miasms and the disease miasms were both thrown out of the man's system and he was well again. This illustrates the antidotal treatment, that our author is recommending. Dr. E. D. Sawyer, of Chicago, we believe first originated this system, and the latter observer speaks enthusiastically of the results obtained. It is simple enough and easy to try.

THERAPEUTIC NOTES.—Under this caption, the *Medical Forum* offers some practical thoughts each month. In cases of indigestion occurring in nervous people, especially nervous women; remember *Zincum metallicum*. If there is present a great deal of flatulence, the indication is so much stronger. If Belladonna fails to relieve the headache for which you felt sure it was indicated, try next *Atropine* *4x*. In treating an inflamed bubo, do not use iodine, but prefer *ichthyol* in its place. *Santonine* *1x*., three to five grain doses, repeated every three hours till five doses have been taken, then a dose every night for a week; will cure almost every case of lumbricoides. (It is possible that santonine in the crystalline form, is preferable to the powdered trituration in the treatment of round worms. The dose for a young child had best be kept between one-fourth and one-half a grain. An adult may take more than this of course.)

THE PLACE FOR ALCOHOL IN TREATMENT OF CHRONIC NEPHRITIS.—Alcohol, above all others, must be counted among the irritants of the kidneys. We may positively assume that the diseased organ is more sensitive to alcohol than the healthy kidney. It would be a mistake, however, not to take into account the *transitory* indications for the use of alcohol. The most frequent indications for the use of alcohol in kidney disease, are loss of appetite and disturbances of the heart. If the patient has been a habitual user of alcoholic beverages, he may suffer from anorexia as soon as the alcohol is totally withdrawn. Small quantities of a light wine will prompt-

ly overcome this, and may be preferable to the symptoms produced by total abstinence. Among the various disturbances of the heart that occur in the course of atrophic chronic nephritis, stenocardiac attacks are especially amenable to treatment with alcohol. (The author means attacks resembling angina pectoris.) Even in the advanced stage of the disease, it is often possible to prevent the nightly attacks of uraemic-cardiac asthma by the administration of half a small bottle of champagne, etc., during the evening. With these exceptions the patient must not be allowed to use alcoholic beverages.—(From *Von Noorden*.)

MERCURIUS CORROSIVUS IN PERITONEAL INFLAMMATIONS.—Those of us who have followed pretty closely the writings of the late Richard Hughes doubtless have been impressed by his repeated statements regarding the efficacy of the corrosive mercury in the treatment of peritonitis. Hughes has even found it curative in peritonitis set up by mesenteric tubercles. He has also given it first place in the therapeutics of the peritonitis that can be traced to mechanical causes, such as wounds, operations, injuries. We do not report our confirmations of these and similar published observations as frequently as we should. Next to the accurate pathogenesis, the accurate confirmation at the bedside is the most important factor in therapeutic progress. It is a mistake to suppose that carefully reported cases containing confirmations of our law, are not read and appreciated. They are, at least, by the knowing-ones. Here is a case of peritonitis, reported by Dr. Chakravanti, *Homœopathic Review*, that cannot help but be of use to some one. A woman, the wife of a coal-dealer, six days after the birth of her child, was found lying upon her back, with her thighs and knees strongly flexed. She had a high temperature, and was suffering severe abdominal pain. The pain was piercing and sticking, and, seemed located near the left ovarian region. The abdomen was hot, distended and very sensitive to touch or to pressure. The bowels were confined, there were frequent efforts at vomiting. The pulse was quick and wiry. She was breathing rapidly and with effort. The urine was very scanty and passed with much difficulty. On listening over the abdominal walls with his stethoscope, the doctor heard a peculiar friction sound. The face was pale and her expression indicated great anxiety. What more is needed to complete this picture? One could not doubt the diagnosis of peritoneal inflammation. One grain of the third decimal trituration was administered every three hours, and the patient was convalescent at the end of one week. We believe this simple report must show to every one, the importance of clinical confirmations.

HEPAR IN SUBACUTE CATARRHS.—Dr. James B. Brown says that as so many people treat themselves for "cold in the head," we are frequently called upon to finish up a subacute catarrhal process that has lasted for weeks. He finds that generally, in such cases, an antipsoric remedy is the one needed. When we find a tickling cough, or a hacking cough that is produced by a tickling in the larynx, and the patient tells us that they have not been free from symptoms, nor in good health since a cold contracted some months previously; the author recommends that *Hepar* be given.

KALI MURIATICUM IN CHRONIC RHINITIS.—Dr. D. Strickler considers

Kali muriaticum one of our best remedies for chronic rhinitis and catarrh, when the Eustachian tubes are closed, the membranes thickened as well as the drumhead. The secretions are thick and tenacious, may be opaque white, or, yellowish-green scabs may form in the vault of the pharynx. It is a favorite prescription for those cases presenting the picture of chronic catarrh of the nose and throat, with involvement of the middle ear and the Eustachian tubes. If the tube cannot be inflated by the Politzer Bag, give *Kali muriaticum*; and, within a few days, the inflation can be easily performed.—(*Progress*.)

MERCURIUS IN DISTEMPER OF HORSES.—Dr. F. J. Gale has several times used this remedy in distemper of horses. He administers the 3rd or 6th dilution, upon the grain, three times each day. Many of those animals that have been brought from the West suffer from this disease. There is profuse, acrid, mucous discharge, swelling of the glands about the throat and a rough, hoarse cough. The author reports success.—*North American Journal*.

SOME REPORTS FROM THE GYNECOLOGICAL DEPARTMENT OF THE LONDON HOMOEOPATHIC HOSPITAL.—Every reader of the reported cases and cures published by Drs. Margaret Tyler and Edwin Neatby, in *Monthly Homœopathic Review*, will be impressed with the excellence of the work of these homœopathic physicians in the special field of gynecological practice. We wish that we might republish their reported cases in full, but space will not permit. Thus we find a case of cyst-adenoma of the left breast, very hard, adherent to nipple, but otherwise movable, size of a walnut; cured with *Phytolacca* tincture within a few months. A case of chronic mastitis, with lump in breast cured with *Kali iodatum* 6. In reference to the iodide of potassium, these observers claim that it is almost specific for chronic mastitis, with extreme tenderness and intolerance of pressure. Worse for some days previous to each menstrual period and better each time after the flow has been established. It would seem as if we missed something by not using the iodide more frequently in potentized form. Some years ago, a man came to us complaining of extensive syphilitic eruptions upon elbows, back and chest, of the pustular and ulcerative variety. He had received much mercurial and iodide treatment. We gave him potassium iodide 30th, and his recovery was surprisingly rapid. Since then we have frequently used both the 3x and the 30th, and can testify that it is a dependable remedy in potency for its various indications as given in the materia medicas. The case of menorrhagia cured by *Thlapis Bursa pastoris* 30, was an excellent one. This remedy is not recognized as being one of our best in hemorrhagic conditions. At least, one does not read of its being used very frequently. We have used it very often; and, generally, with excellent results. For example:—An aged woman had a large prolapsed kidney. Every few months she suffered severe pains in the region of the right renal region, extending downward along line of right ureter. This pain was followed by bloody urine for many days. After much unsuccessful experience with remedies, we selected *Bursa pastoris*. It acted quickly, and in every subsequent attack was effective within a few hours, relieving pain and hæmaturia. Dr. Dudgeon wrote extensively of this remedy. It has been found to be a remedy capable of promoting the

throwing off of much uric acid sand, and has cured many different conditions associated with uric acid. We have had several splendid results in metrorrhagias of uncertain origin.

RINGWORM CURED BY CONSTITUTIONAL TREATMENT.—Dr. Thomas Skinner reported in the May *Advance*, some eight or nine cases of common ringworm upon various portions of the body, which he had cured completely in a short time, by *Sulphur, Calcareo and Sepia*. Dr. Skinner's views may be considered to be extreme, but he gives us facts that cannot be denied. It is also worthy of note, that these cases occurred in a boarding school for young women, and that the very capable allopathic physician of the school had given full and particular attention to every detail of their management. Nevertheless the disease spread, and was not checked until Dr. Skinner gave his constitutional remedies; without local measures of any sort. The author does not doubt the existence of parasites in the least. He looks upon them as mere concomitants. He regards the parasite as one of the results or effects of the disease rather than its cause. Very few physicians, just now, will agree with this statement, but perhaps the future may hold some startling surprises in this connection. Dr. Skinner's cases are republished in June *Monthly Hom. Review*, and are quite interesting.

CYSTITIS IN THE FEMALE.—Dr. Horace Packard, in *New England Medical Gazette*, expresses the opinion that internal medication, unassisted by local measures will generally fail to eradicate a septic cystitis. He cannot say much for symptomatic indications. It is a very significant fact that every case of chronic cystitis that has drifted into this author's hands, has given a history of some illness or of some operation during which or after which catheterization has been resorted to. The use of the catheter then marks the beginning of bladder trouble in so many instances. Will general practitioners take this lesson to heart? At the present time we hear less of the old-fashioned statement that during catheterization the woman should not be exposed and we hear more of the necessity for good light and a clear view of the parts to be operated upon. This, in itself, is a stride in the right direction. The instructions given our Hospital nurses and quoted by Dr. Packard, might be learned by most of us with advantage to our patients.

1. Boil a No. 9 soft-rubber catheter.
2. Place patient in a good light on the back with knees widely apart.
3. Separate labia, wash vicinity of meatus thoroughly with soft gauze, soap and water, and a one to five hundred Formalin solution.
4. Wash hands, sterilize them and then introduce catheter, without permitting it or the hand to touch an unsterilized object.

If such rules were generally observed, perhaps the frequency of cystitis would be materially lessened. The older plan of hunting up a rusty catheter from the tool box, and poking it into the urethra, after several attempts, to the accompaniment of dirty finger nails and the bacterial chorus, is happily a thing of the dim and distant past, when "you and I were students." Or does this faulty technique still lurk in certain suburban localities? Chronic cystitis is still very common, you know. If Dr. Packard's paper is widely read it ought to become a rarer disease. He asks us to

preface our local treatment, by a bacteriological study to determine the *kind* of infection that is causing the trouble. Then we can use the antiseptic solutions best suited to the needs of the case. For the *colon bacillus*:—Use Condy's fluid, corrosive sublimate (1 to 25,000) or formalin (1 to 800).

For *Staphylococcus*, *streptococcus* and *typhoid bacillus*:—Use corrosive sublimate or formalin or salicylate of soda (dram to pint).

For *tubercle*:—Use zinc chloride or iodoform emulsion.

For *gonococcus*:—Use silver nitrate or argol.

Many cases are cured by these simple measures, some must be subjected to drainage by vaginal or suprapubic cystotomy. Some must be curetted to clear away the incrustations of urinary salts. In the discussion which followed the reading of this paper, it came out that sometimes the indicated homœopathic remedy cured cystitis. Urotropin was mentioned as a valuable remedy; but likely to occasionally produce inflammation of the kidneys. Phosphaturia and suppuration of the urinary tract was its proper field of usefulness. This sort of a paper sometimes discourages the general medical man into a belief that quite soon we shall witness the exit of the *similimum* from the stage of active every day practice. For such we offer the encouragement of Dr. George H. Talbot's statement that "a well qualified physician can treat at least ninety per cent. of all the patients that come under his care; and if he is a conscientious man, as I am proud to say a very great majority of our profession are, he will admit his limitations and refer exceptional cases to one who, by special study and observations, is more capable than he of treating them." The general medical man is himself very largely to blame for the feeling that has grown among the laity that the family doctor is not as skillful as the specialist. The better informed general practitioners of the present day are doing a great deal to restore the confidence of the public in the family physician, as the best *general adviser* of the family in medical and surgical matters.

X-RAY SAVES AN EYE.—As an illustration of the importance of the X-ray as a factor in accurate diagnosis, the case reported by Edgar J. George, M. D., is splendid. A man, aged twenty years, was shot while out hunting quail. The birdshot entered the left eye quarter of an inch from the sclero-corneal margin, on the temporal side. Marked hemorrhage into posterior chamber and some hemorrhage into anterior. Specialists to whom the man applied, recommended immediate enucleation. Dr. George was not willing to remove the eye until he felt sure that the shot had remained within the eyeball. He skiagraphed the case, and found that the shot had passed through the eye and had imbedded itself in the cellular tissue in the neighborhood of the orbital plate of the frontal bone. This was a triumph of diagnosis. Within a month, under atropin and the internal use of *Arnica 3x*, the intraocular hemorrhage had been entirely absorbed and the vision was twenty-twenty-fifths. At the time of the injury it was—T. 2 L. V. 15-200. This is the second time that the author has used X-ray in such cases. He believes that his experience shows that birdshot are aseptic, harmless and after a time become encysted in the tissues.—*Homœopathic Journal E., E. and Throat*. A skiagraph accompanies the article and shows the shot in position.

NOTE ON EXAMINATION OF BLOODY URINE.—In all cases of hematuria, Dr. Clifford Mitchell says, dilute the urine several times its volume of water before centrifuging; water dissolves the blood corpuscles, but has no effect on shreds of connective tissue which sometimes are found in abundance in the case of growths.—*Medical Visitor*.

CUPRUM ARSENICOSUM IN ASTHMA.—Dr. Blackwood recommends this remedy in bronchial asthma and in the asthma that accompanies emphysema. While the distress is constant, it is subject to periods of aggravation. It will be of service, in this class of subjects, when hay-fever is also present.—*Medical Visitor*.

STELLARIA MEDIA IN RHEUMATISM.—Dr. Frederick Kopp makes the surprising statement that "medical men in both hemispheres, are now agreed that of all the existing remedies for the treatment of rheumatism, *Stellaria media* is the most effectual and consistent in its curative effects. "It is not quite so bad as that; but, nevertheless the chickweed is a promising member of the rheumatic group of remedies. It has been proven by the University of Michigan Society of Drug Provers and a synopsis of the effects produced has already appeared in the Retrospect. The rheumatoid pains produced by this tincture resembled those described in the pathogenesis of our Pulsatilla. These pains appeared in many portions of the body, were aggravated by rest and from warmth; were ameliorated, on the other hand, by fresh, cold air. The pains were sharp, darting, *shifting*, accompanied by soreness and stiffness of affected parts as well as neighboring joints. Then, again, it was noted that *constipation*, evidently from stasis and congestion, was a feature. There were also symptoms pointing to a hepatic torpor and congestion, and a morning lassitude, with loss of appetite and nausea that suggested similarity to the effects of our Nuxvomica in these spheres. Dr. Kopp relates a case in which he had a happy result from the administration of *Stellaria*. This patient was a woman, aged thirty-six years. The whole of the left lower extremity from the left hip joint to the foot was affected. The pain was not so severe during the daytime, but at night it was excruciating. Shooting, darting pains from hip to the knee and from thence to the left foot. The warmth of the bed seemed to aggravate these pains. *Rhus tox.* failed to produce the result expected of it, when *stellaria 2x*, one drachm to six ounces of water was prepared and administered in two drachm doses every third hour. It has been observed that the external use of a lotion of *Stellaria*, strength one to ten of methlated Spirit, applied to the affected part assists in the cure. This case is well reported in *Homœopathic World* for July. Almost every issue of this excellent journal contains an article by Dr. Kopp, entitled "Cases I have come across." Very interesting indeed are many of his clinical experiences with homœopathic medicines.

TANACETUM VULGARE IN ABNORMAL LASSITUDE.—In a proving made by Dr. Kopp of our common tansy, he particularly observed that the plant produced an abnormal degree of mental and physical lassitude. The condition he summed up in the expression, "a half-dead, half-alive feeling all over." There was a general feeling of laziness; tired, exhausted feeling

while walking, a persistent nervous and tired feeling; exhaustion; great mental fatigue after the least exertion. The tansy patient is also very irritable, sensitive to noises or other disturbances. Very low spirited; and, many of the complaints are aggravated by being in a close room, ameliorated by the open air. Dr. Kopp mentions in *Homœopathic World*, that he has cured several cases of this extreme lassitude and exhaustion by the first decimal dilution of *Tanacetum*. Certainly we have all frequently looked for such a remedy. The author has sometimes alternated the *Tanacetum* with *Nux vomica* and gotten excellent results. In the provings of tansy there were produced a little group of ear symptoms which are rather suggestive to the ear specialists and it seems as if some application might have been made of them. The ears seem to *close up* quite suddenly, the voice sounds strange to the patient, there is roaring and ringing in the ears. We are not overburdened with remedies affecting the eustachian canals in this way, and perhaps the tansy will be added some day.

MOMORDICA CHARANTIA (MOMORDICA INDIANA).—Dr. B. B. Chakravarti, of Calcutta, says that this Indian variety of the momordica has been proved and re-proved by twenty persons during the past twenty years. These valuable records may not have been published, as we have never seen them in print, but they should be published in detail. The remedy does not appear in Bradford's Collection of Provings. Our *Momordica Balsamina*, the common Balsam Apple, is rather well known as a domestic remedy. Its effects are strikingly similar to those mentioned by Dr. Chakravarti; griping, colicky pains, with distention in region of the splenic flexure of the colon. The effects of the Indian *Momordica* were, however, more severe. The intestines seemed as if full of a yellow, watery fluid, which was discharged *explosively*, as if poured out of a hydrant. There were similar colicky, griping pains and some nausea and vomiting. In one prover a true picture of cholera in its second stage was produced, with the cramps, thirst, prostration and discharges. Dr. Chakravarti has used the *Momordica Indiana*, 3x. dilution, in cases of diarrhœa, with the characteristic explosive expulsion of thin, yellow, watery stools; and the remedy acts quickly so that not many doses are required. The profession in Calcutta have used this remedy very successfully, and we should have it on this side, because its effects would seem to class it with those commonly indicated drugs:—Croton Tiglium, Aloes, Apocynum and Elaterium. It does not appear upon Boericke & Tafel's list of remedies, but we trust it may later. The American Homœopathic profession would much appreciate a book upon Indian remedies, provings and therapeutics. Our colleagues in India are doing splendid work in *Materia Medica* and Homœopathic Therapeutics, and we hope some day to have the results of their labors in book form. Many of Dr. Chakravarti's articles appear in *Homœopathic World*.

THE REPETITION OF DOSES.—Of course the first and most important step in making a successful prescription, is the accurate selection of the remedy. But, we might say; without overstepping the truth, that the frequency of repetition of dose is quite as important. In chronic cases, particularly, too little importance is attached to this. A fair trial will con-

vince one that one or two doses a day; say morning and evening, is a method far superior in its results to the usual method of ordering a dose every few hours, without regard to duration of activity or individual idiosyncrasy. Indeed, it will sometimes appear that a single daily dose is still better; or even a dose less frequently than that. One learns readily, by experience, which remedies bear frequent repetition, and which do not. But, very slight attention is paid to this fact in every-day work. And it is a pity.

INFLUENCE OF CRATAEGUS UPON THE ARTERIES.—Dr. Clements says that his experiments have shown that this drug has a wonderful solvent power upon crustaceous and calcareous deposits in the lumen of the arteries, resembling the effects of iodide of potassium on the nodes of syphilis. Some other observers have claimed that the use of crataegus in aged people with arterio-sclerosis, angina pectoris, etc., will prolong life beyond the time when dissolution would have been certain, had such conditions been neglected. In the beginnings of heart mischief after attacks of inflammatory rheumatism, it has a wide field of usefulness. (Malcom E. Douglass, M. D., in *Medical Counselor*.)

HYDRASTIS AND CONIUM IN CANCER OF THE BREAST.—Dr. Ellingwood differentiates Hydrastis and Conium in mammary tumors in this way: Hydrastis, if the tumor is hard and *painful*. Conium, if the tumor is hard, small and *painless*.

FOREIGN LITERATURE.

CONDUCTED BY P. W. SHEDD, M. D.

New York City.

ADONIS VERNALIS.—According to its symptomatology Adonis is especially indicated in cardiac troubles, with or after rheumatism, but is also useful in cardiac affections following infectious diseases, when the muscle fibres show albuminoid degeneration because of the fever and evidences of beginning fatty degeneration are present. The remedy seems to revivify the paralyzed muscle-cells and remove the cloudy swelling.

Case I. Mrs. F. had a severe infectious disease with continued fever, 39.5—40.3c. On the eighth day the fever dropped suddenly to 37.9c. and the pulse heretofore strong, began to skip beats, while the heart beat intermitted every 3—4 pulsation; there was palpitation from the least emotion; anxiety and anguish. After \mathcal{R} Adonis 1, ten drops twice in 12 hours, the pulse and heart became regular and remained so during the rest of the illness and convalescence without further use of the remedy.

Case II. Mrs. W., 60 years of age, had had cardiac trouble for 20 years. The previous year she had recovered from an apical pulmonary catarrh. Inclined to febrile diseases (influenza) and moderate varicosis. Consulted me August 22, complaining of constriction and dyspnea, head-

ache. Pulse 108, regular. Called me the next morning, as she had not slept all night. Found her sitting up in bed, excited, mucosae pale, face pale, bloated, pulse very rapid, irregular, cardiac action stormy, no murmurs. R Adonis 1, gtt. x. every hour. Ten minutes after the first dose the pulse and heart became regular and remained so under the continued use of the remedy.

This case emphasizes the rapid action of Adonis, while the first case shows how little is required to bring an excited, irregular heart back to normal. The allopathic dose seems to me much too large, so that often the heart is injured thereby rather than benefitted.

The remedy seems to me often epidemically indicated; cases of fainting, palpitation, anxiety, pulse usually accelerated (120), no fever. In such a case Adonis 1 has given the quickest help. To be compared are:

Stropanthus, works just as quickly, but has often failed me.

Cretagus.—After severe infections, (others have seen little result from this remedy).

Kalmia.—Rheumatic heart troubles.

Digitalis.—Violent but not rapid palpitation. Pulse small, irregular, slow.

Kali Carb.—Attacks of palpitation which take the breath away; heart action irregular, violent, or weak; mostly with stitches about the heart and in the shoulders.

Spigelia.—Palpitation from the least movement, pulse irregular, anxiety, oppression, headaches.

Natrum muriaticum.—Anxious oppressed respiration; short of breath from quick walking; anxious palpitation with headache in the A. M., from movement or exertion.

Arsenicum.—Short anxious respiration; thoracic oppression from rapid walking or ascending; palpitation, violently visible and audible, especially at night, with small, irregular pulse.

Cimicifuga.—Palpitation, dyspnea, pulse weak, irregular (80), with muscle-pains (rheumatism), headache. Sensation in the head as if too large.—Dr. Kernler, *Allg. Hom. Zeitung*.

SOME HINTS.

Motor inco-ordination. Onosmodum, Zinc. phos., Oleander. Prostration with total loss of strength and muscular atrophy. Titanium. Abortion with uremia, Jaborandie. Abortion with hemorrhage, Millefolium. Abortion at the beginning of pregnancy, Plumbum. Abortion (sequent) with lumbago, leucorrhoea and debility, Kali carb. Sexual excesses, Kali bromatum. Abuse of tobacco, Plantago. Convulsive attacks in muscles of various parts of the body, Physostigma. Acetonuria, Acet. acid, Arsenic. Acne rosacea, Juglaur regia. Acne sebacea, Platina. Inguinal adenitis, Phytolaca. Mammary adenitis, Gossypium. Adipsia, Manganium. Aphasia, Bosbropi. Aphasia of smokers, Tabacum. Pancreatic troubles, Iris. Very painful syphilitic affections, Mercurious acetitur. Affections of the muscular fibres of stomach, intestines, bladder, mercurialis. Valvular troubles, Delphinina.—*Joya Homœopathica*.

MYXEDEMA AND CACHEXIA STRUMIPRIVA REMEDIES.

If the thyroid be removed from a healthy individual, a syndrome grad-

usually develops, pointing to a disturbance of nerve activity; anemia with sequent physical and mental weakness; dry, harsh skin, with scaling and cracking, thick, brawny, cold, hard, finally an idiotic condition. In myxedema also we commonly find an atrophy of the thyroid. The function of this body is, as far as known, to dispose of toxic chemical products of metabolism, rendering them harmless, and apparently the active principle is iodine, which is demonstrated as an organic component.

Treatment with thyroid extract has been frequently successful, but must be persisted in, otherwise relapses occur. Massive doses must be avoided, easily causing severe disturbances of heart and central nervous system, with rapid prostration and collapse. Homœopaths use Thyroidin in the 3 trit. (a much lighter dose than prescribed by the common school) with success. This is organotherapy, not homœopathy, although the remedy has its homœopathic uses.

The remedies commonly indicated, are:

Argentum nitricum.—General weakness, vertigo, trembling, marasmus; has deep action upon brain, cord, and the vegetative nervous system, and special action upon the trophic nerve centres; also in renal complications.

Aurum.—Melancholy, apathy, dyscratic states, stupidity, cerebral hyperemia, mental inability, cardiac dilatation and hypertrophy, degeneration of cardiac muscle; cardiac weakness and edema; chronic hepatic and renal inflammations.

Baryta carb.—Dullness, interested in nothing, weak memory, mental weakness, can learn or comprehend nothing; speaks with difficulty; bloated face, otherwise thin, anemic; distended abdomen. Fear of people, childish, trembling of the limbs, heaviness and paralysis of the tongue, saliva runs over the lips, which hang down. Inclination to accumulate subcutaneous fat (lipoma). Its action on glandular organs is well known.

Calc. carb.—Skin dry, bloated, lips and nose especially swollen, fat, plump, pale. Lazy, slow, awkward. Related to glands.

Calc. iod.—Very similar (cf. Iodine) and has a special action upon the thyroid.

Causticum.—Weak memory, small mental capacity, taciturn, melancholy, suspicious. Paresis; paralysis of the eyelids, lips, tongue (of cerebral origin). The remedy has skin indications.

Graphites.—Relations to skin, atrophy of nails, falling out of hair.

Iodine.—Lazy, peevish natures, dull, puffy, bloated skin, bulimia, anemia; scrofulous; dry, harsh skin, weakness, atrophy of glandular organs; greatly influences the thyroid body.

Natrum mur.—Dull, harsh, dry skin, loss of nails and hair; depression, great exhaustion and weakness, anemia, marasmus, gland troubles.

Silica.—Temperament indifferent; weakness of mind and memory; gloomy. Related to skin, hair, nails, glands.

Spongia.—Cardiac Affections. Thyroid swellings.—*Allgemeine Hom. Zeitung*.

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SORE THROAT AND ITS TREATMENT.

BY H. S. WEAVER, M. D., PHILADELPHIA, PA.

IN presenting this paper to-night the title alone will explain its unscientific character, but I thought one dealing more with the clinical characteristics of some of our remedies in the treatment of so common an ailment would elicit more or less discussion from each member present and thereby be helpful to all of us.

Our Materia Medica is so rich in remedies, with such clear-cut indications that it seems a shame for us not to be able to use them more accurately and not depend upon our pharmaceutical friends who are so lavishly supplying our offices with the latest up to date preparation for the cure of all diseases.

I do not expect to present a lot of new thoughts, new ideas, or new remedies, simply giving a few hints as to the line which I follow in the treatment of these cases and the one which I have found to give me the best results.

The remedies which I shall name and the indications as given will not be those selected from books, but those which have stood the test over and over again in practice. In other words I will endeavor to present a clinical picture of the various forms of sore throat and then prescribe the remedy with the chief indications which aided me in the selection of the drug.

To study our subject more closely and scientifically it will be well to divide it into Acute and Chronic conditions.

Acute Pharyngitis which will include Uvulitis and acute inflammation in the postnasal space.

2. Erythematous Tonsilitis.
3. Follicular Tonsilitis.
4. Diphtheritic Tonsilitis.
5. Syphilitic Pharyngitis and Tonsilitis.
6. Parenchymatous Tonsilitis.

(See table on page 723 for differential diagnosis.)

Chronic Conditions.

1. Chronic Follicular Pharyngitis.
2. Chronic Follicular Tonsilitis.

The acute euthematous conditions which involve simply the superficial or membranous covering of the parts, as seen in acute colds and may be classed or diagnosed as a uvulitis pharyngitis or erythematous tonsilitis accordingly as the mucous membrane over the different parts of the throat become involved (are the most common forms of sore throat.) The majority of which are never seen by a physician, it usually runs a very short course and is well before the patient thinks of calling in medical aid. Usually some simple home remedy or gargle is all that is necessary. These superficial congestions in many cases are simply the initial manifestation of the acute exanthemata and quickly subside upon the full development of the disease or the inflammatory condition soon extends into the deeper tissues and it no longer can be classed under this head.

Another class of cases are those who, upon the least exciting cause, develop these acute superficial congestions. This variety of sore throat which is associated with more or less cold in the head, painful deglutition, a few general mallays and macroscopically presents only a general enthenia of the facial tract is more common in the fall and spring, when the weather is very damp and changeable, and is especially prevalent among those who are exposed to these sudden and marked barometrical and thermometrical changes.

The predisposing causes which make the patient more susceptible to these changes are gastro-intestinal disturbances, gouty conditions, rheumatism, torpid liver or bilious temperament, sedentary life with lack of outdoor exercise, etc.

In the treatment of these cases I depend almost entirely upon

DIFFERENTIAL DIAGNOSIS.

ACUTE ERYTHEMA.	FOLLICULAR TONSILLITIS.	DIPHTHERIA.	SPECIFIC.	TUBERCULAR.	PARENCHYMATOUS.
General erythema. Wholefaucal cavity red and congested. No patches. Uvula red and may be oedematous. Some general malaise.	Onset sudden, usually with chill. Rapid rise in tem., to 103-104. Quick pulse. Unusual amt. of pain in all parts of body, espec. back and head. Tonsils more swollen, red and exudate chiefly in the crypts, but may extend over surrounding parts, and is easily mopped off. No bleeding surface underneath. No glandular enlargements to speak of. Sudden decrease in sym. No Klebs Loeffler bacilli present.	Onset gradual, without chill. Slow rise in tem. Pulse less rapid. Aching in bones and head less marked. Tonsils less swollen and red membrane on any part of tonsils or surrounding structure. Mem. more tough, not easily detached, and leaves a raw, bleeding surface. Glandular enlargement. Gradual increase in all symptoms. Albumin in urine. Klebs Loeffler bacilli present.	General erythema. Whole cavity red and congested. More marked in areas. Small or large patches in these areas with well defined edges, covered with a dirty grayish colored mucous deposit. Usually history of having sore throat for some time. Very little if any rise in tem. History of sore? History of rash. Glandular involvement.	General pallor. Parts infiltrated or areas of ulceration with ragged edges. Rarely primary lesions. History of long involvement. General loss of flesh. Tubercle bacilli present in sputum. Rapid, peculiar pulse.	Sudden onset. Usually with chill. High tem., rapid pulse. Pain localized. Sudden swelling, which increases until swallowing is impossible. Cannot open mouth well, uvula and soft palatine very oedematous. Suffering intense. Great relief from opening or spontaneous rupture of abscess.

my internal remedies. In the first place the use of local applications in these acute conditions will almost invariably aggravate your trouble, so that your patient soon after leaving your office will complain of additional distress rather than relief from treatment. A mild oily spray will usually give some relief, but the ordinary local applications I have discarded in acute conditions and rely upon the internal remedies.

Those usually indicated are as follows :

Bell 2x or 3x is a very useful remedy in these conditions. The whole throat is a very bright red, usually worse on the right side. Intensely raw, irritated sensation, worse when swallowing but also quite painful during the intervals of deglutition. Constant desire to swallow. Liquids cause more pain than solids. Face red, eyes congested, headache, usually throbbing in character, and worse in frontal region, general systemic disturbances, with the usual malaise, backache, throbbing pulse, etc.

Guajacum O or 1x. The symptoms calling for this remedy are very similar to those of *Bell*. but lack the constitutional disturbances always found in patients needing *Bell*. Complain of aching in the throat and muscles of the neck, great tendency to hold the muscles of the neck when speaking to relieve the aching and tired feeling. Some rheumatic history.

Capsicum 3x or 6x. Red like *Bell*. but has more of the burning and stinging pains with less febrile disturbance rather inclined to be drowsy. Going out into the cold aggravates. Tongue coated white and the faucial tissues are more baggy and slightly darker in color than you find in *Apis*. The intense burning is a great characteristic of remedy.

Apis Mell 6x. Red and œdematous uvula and soft palate with blister-like swellings over the uvula and soft palate which are filled with a serous-like fluid. Breathing at times labored, voice indistinct, swallowing difficult and very painful, due to œdematous swelling. Stinging and burning pains when swallowing.

I believe if *Apis* were prescribed in more cases, instead of the *Merc. Iod. Rub.* which seems to be the first remedy thought of by most physicians in cases of sore throat, the patient would make a much quicker recovery.

Merc. Cor. 3x—6x. Soreness especially severe in the post-nasal space, with pains shooting up towards the ears. Parts are less red than in *Bell*. with the desire to cough. Throat

feels dry and stiff. I frequently give Bell. and Merc. Cor. alternately in these acute postnasal troubles with good results.

Lachesis 30. Throat is dark purple, livid color, usually worse on the left side and there is a decided constricted feeling, everything around the neck feels too tight, always worse when waking from sleep.

In acute Follicular or Lacunar Tonsilitis the onset is sudden and the systemic disturbances from the start are usually severe. Not infrequently you will find that the patient will give a history of leaving home in the morning well, and by night will have a temperature of 103 or 104 and not able to be out of bed. At times these febrile symptoms come on so swiftly that the real cause of the disturbance is not referred to the throat at all, the local manifestation of pain in the tonsils is so slight in comparison to the system furor going on that it is overlooked by the patient. In these cases the pain and soreness increases even after the temperature commences to abate.

The pains are at first a pricking or stinging sensation in the throat which increases until it becomes a continuous pain referable to the tonsillar region. In the worst cases the skin is first dry, hot and red. The patient is very restless and at times delirious, later the skin becomes moist and clammy which is indication of the severe prostration so common after these attacks.

The pathological changes which take place in these attacks are chiefly found in the secretions exuding from the lacunæ of the tonsils. These pockets, crypts or lacunæ are filled with plugs of dead epitheleum leukocytes and various micro organisms which lower the vitality of the surrounding structures to such extent that the resisting power is lost and the slightest exciting cause, such as draughts, damp feet, climatic changes, etc., will precipitate an attack. Either one or both tonsils may be effected. The exudate first forms in the crypts and later may extend over the body of the tonsil, but is more easily detachable, and does not leave a raw or bleedy surface underneath, as it does in diphtheria. This membranous secretion when examined under the microscope shows abundance of Staphylococci and Streptococci. The Streptococci it is claimed by some of the best authorities are the cause of these inflammatory reactions, not colds per se as was formerly thought. The exciting causes simply lessen the resisting power of the parts and allow the baccilli to develop.

The treatment of acute lacunar or follicular tonsilitis should be first, the relief of present attack, and, second, the prevention of another. Isolation when confined to the house is very necessary, especially so, if there are small children around. The throats of the young coming in contact with those suffering from acute follicular tonsilitis become more susceptible to infectious diseases.

I will first take up the remedial treatment, and later the preventive or prophylactic.

Merc. Iod. Rub. is probably the remedy most frequently used by the physicians in our schools either alone or in alternation with Bell or in combination in the same tablet. It is a clinical fact that these two remedies in the majority of cases will carry your case through very nicely. *Merc. Iod. Rub.* is particularly called for in cases with marked glandular involvement, intense redness and swelling of the tonsil itself, with numerous dirty, grayish deposits exuding from the crypts, looking like a pepper box lid. Usually worse on the right side, and let me say here that when I find the right side worse with the above symptoms I always give Bell with the Mercury. Clinically I have not been able to demonstrate the superior action of *Merc. Iod. Rub.* for left sided inflammations over the *Merc. Iod. Rub.* as stated in the books. Bad taste in the mouth, ptialism, great prostration, intense aching all over the body, but particularly bad in the back. Shooting pains from the tonsil into the glandular enlargements in the neck and into the ears, soft palate, red and swollen but not œdematous as found in apis.

Apis in these conditions is a remedy far too seldom used. The throat presents almost a perfect clinical picture of the remedy as shown by our provings. Uvula and soft palate œdematous, tonsils studded with follicular secretions, intense pain when swallowing, stinging in character, quantities of stringy mucous in throat, respiration difficult, phonation indistinct and painful, shown by the patient wincing when speaking and swallowing.

Ignatia in nervous patients where all the symptoms are aggravated and it seems difficult to say this case is one of follicular tonsilitis and this one diphtheria. In other words all the conditions resemble more closely the diphtheria type, slower in onset and more tendency for the exuding secretions to spread over the tonsil and form a membrane. Usually more

pain during the interval of swallowing than during the act, marked prostration and slow in recuperating.

Lachesis. The usual constricted sensation around the neck. Tonsils swollen but more livid-looking, worse on left side and after sleeping.

Gelsemium early in the attacks is a valuable remedy, but usually the physician does not see the patient in time to prescribe it and obtain the best results, consequently it is rarely thought of by the prescriber in this class of cases.

Baryto Carb., *Phytolacca*, *Sanguinaria Can.*, *Merc. Sol.*, *Merc. Cor.*, *Guajacum*, and a number of others are frequently indicated, but time will not permit me to go into the details of all the remedies useful in this disease.

DIPHTHERIA.

In this paper I have purposely omitted everything under this head except the differential diagnosis.

In my paper I wish to consider simply those cases which usually come to your private office or to the out-patient department of our dispensaries. Parenchymatous Tonsilitis, or Quinsy is an inflammation of the body of the tonsil and surrounding tissues with pus formation. In the majority of cases this formation of pus takes place at the upper border of the tonsils and involves to a marked degree the soft palate. These attacks come on suddenly, usually with a chill or chilly sensation, some rise in temperature, generally malaise and headache followed by a slight soreness in one or the other tonsils which gradually increases as the swelling progresses until the pain becomes agonizing. The voice is decidedly changed, deglutition is painful, difficult and at times impossible. The uvula and soft palate becomes œdematous and there is an increased amount of mucous poured out into the buccal cavity, which is stringy in character and hard to expectorate. Patient has a constant desire to clear his throat which causes intense suffering. As the swelling enlarges the jaws become fixed and at times the tension of the swollen parts is so marked that it is impossible to open the mouth at all. Opening by lancing or spontaneous rupture of the pus cavity gives immediate relief, and usually resolution is rapid and complete, but at times a reinfection occurs either on the same or opposite side, and all the preceding symptoms are again gone over, with the

patient in a debilitated state and less able to stand the suffering.

The causes of a parenchymatous tonsilitis are about the same as in acute follicular with an occlusion of some of the ducts and an extension of the inflammation into the surrounding structures with pus formation. This takes place in the majority of cases above the tonsil, but it may burrow down posteriorly so that the pointing of the abscess may be near the rim of the larynx. I saw one case this winter where I evacuated about half ounce of pus by making a puncture in the lateral wall just above the larynx. Cases similar to this are very critical, and if spontaneous rupture should take place during sleep or at an unguarded moment the patient is in danger of being suffocated by the sudden filling of the larynx with the evacuated pus.

The treatment of these cases should be carefully considered, and if they are seen early, before the formation of pus has taken place, I believe many of them can be aborted.

Guajacum O or 1x and *Hepar Sulph.* 2 given alternately have given me the best results in the aborting of these cases. The symptoms calling for these drugs are the same as those given under acute follicular tonsilitis.

When the patient complains more of rheumatic pains I have given *Guajacum* and *Rhus Tox.* alternately, but not with the same gratifying results as with the former remedies.

Apis Mell. presents as near a similitum to this condition as a remedy possibly can and I would not like to practice medicine without it. The symptoms are about the same as named before.

Now I know that some of you are going to say I never get results when I prescribe *Apis*, and I in reply will say that your remedy is no good, throw it out and get another supply and when you do get a good quality hold on to it and do not be afraid to run it up when the bottle is nearly empty. There is lots of *Apis* on the market which is no good, and if you have some and have tried it several times without results throw it out and get a new supply.

Hepar Sulph. In patients having a chill or chilly sensation or rigors all indications of beginning pus formation. Later it assists in the evacuation of the same. Great sensitiveness to the least draughts, some perspiration.

Baryta Carb., Merc. Sol., Phytolacca, Silica, Calc. Sulph.,

Capsicum, and *Sulphm* are remedies useful in cases, but are less frequently indicated than the former ones, according to my clinical experience.

When pus has formed and you can detect a point of fluctuation the best practice is to incise it; this will give almost instant relief, and your patient will be able to swallow and as this was impossible before, usually the first thing asked for is a big drink of water. The incision should be made over the fluctuating area, and as this is usually above the tonsil the incision should be made through the soft palate in a line with the muscular fibres and always cutting towards the centre. Where the pus is deep it is safest to make your puncture, then introduce a blunt hook, directing the point towards the angle of the jaw and hunt for the pus cavity; this avoids all danger of cutting some of the larger vessels in the neck. The opening must be large enough to give free drainage and should be kept open for two or three days until all the discharge has ceased.

The preventive or prophylactic treatment of these various sore throats will consist in regulating the patient's habits so that the best degree of general health can be had. Regular meals of a good, substantial, non-stimulating character, with proper amount of outdoor exercise, cold salt water baths in the morning followed by a brisk rubbing of surfaces, will greatly aid in the reduction of these attacks. When the patients are rheumatic a carefully studied course of treatment should be given, and if constipated this should be corrected. When tonsils are enlarged, the diseased portion protruding beyond the pillars, should be removed. If they are not enlarged, but contain a number of small pockets which collect tonsillar secretions, particles of food and various micro-organisms which decompose and cause a low grade of inflammation to be constantly present; these should be thoroughly cleansed and the partitions between the various crypts destroyed either by tearing with a blunt hook or by galvano cautery point heated to a cherry red, thus converting a number of pockets into one with a large opening allowing free exit for all secretions.

CANCER OF THE UTERUS,

BY N. F. LANE, M. D.

(Read before the Homœopathic Medical Society, of Pennsylvania, Sept., 1905.)

THIS paper is intended to act as a reminder of things we already know, and is not intended to advance anything particularly new.

We all *should* know that cancer is one of the common gynecological diseases that we have to treat; we all *should* know the symptoms of the disease; we all *should* know that treatment, to be of any lasting benefit should be given very, very early; and yet, are there not some among us who at times get careless and allow our patients to drift along during the early stages, neglecting to take note of certain symptoms that should alarm us and call for prompt investigation, until the patient is beyond all reasonable hope for permanent or even much temporary assistance.

It is this thought that prompts this essay; a feeling that we do actually at times become careless in the matter of diagnosis, prescribing symptomatically, and letting it go at that. There may be some maladies that can be treated by medicines without making other than a tentative diagnosis, but there are others where the diagnosis is of the first and utmost importance, and cancer of the uterus is one of these. In fact, an honest effort at diagnosis should be made in every case of illness we are called upon to treat.

Those among you who are doing much hospital or dispensary work, know that you frequently get cases of uterine hemorrhage that have been treated by medicines, under the impression that the bleeding was due to the menopause. Fortunately, the laity are beginning to understand the possible significance of menorrhagia and metrorrhagia, and the matter of cancer may soon become like the present status of appendicitis; the patient often making the diagnosis before the doctor is called.

I believe in our medical work, we occasionally need a good shaking up, and this is perhaps the more necessary, the more common the disease, and as long as uterine hemorrhage is treated without an effort at diagnosis, so long will papers like

this be in order. The foregoing is my apology for inflicting this subject upon you.

The etiology of cancer is obscure, and unless one is doing some original work along this line, it is hardly worth while to discuss it. For the present, we can all think as we like.

Of the varieties of cancer with which we come in contact, the most common are the squamous celled carcinoma attacking the vaginal cervix, the adeno-carcinoma attacking the cervical canal and the fundus. The symptomatology of the first two varieties is often, unfortunately, very meagre, thus giving us less chance for early interference. The one fairly constant early symptom is vaginal discharge consisting of a leucorrhea with more or less hemorrhage. This leucorrhea, accompanying all varieties, is inclined to be watery and irritating, and of an offensive odor. The bleeding in the squamous-celled variety at first usually follows some mechanical violence, such as coitus, or after the introduction of the nozzle of a syringe. Later, the bleeding becomes more constant and is not dependent upon mechanical interference.

The cervical varieties of cancer do not affect the menstrual period, as does the adeno-carcinoma of the fundus.

Here the menstruation is inclined to be prolonged and profuse. Cancer, when attacking the fundus, is accompanied frequently by severe pain even in a comparatively early stage. The early symptoms, as before stated, are confined practically to abnormal vaginal discharge in the form of leucorrhea or an irregular bleeding. This bleeding is associated in the mind of the patient with the menstrual function, and as she expresses it, "My menses are too frequent, irregular, or profuse," or if she be past the menopause she says, "My menses have returned but are irregular." We cannot depend upon pain as an early symptom; the patient being usually beyond help when this occurs, excepting in cases attacking the fundus. We must depend therefore upon a metrorrhagia as our guiding symptom and insist upon an investigation as to the cause of every case, if we expect to get our cancer cases early enough for radical operation, which is their only hope of cure. Even this symptom is often, unfortunately, too late to be of value.

The diagnosis in the majority of cases is a simple matter for the reason that we usually get our patients in an advanced stage of the disease. When seen early, the diagnosis is sometimes by no means simple and we must consult the histologic

pathologist for the help his microscope can give us. Probably the condition most likely at first glance to be mistaken for cancer of the cervix, is a cystic degeneration with lacerations and eversion of the cervical mucous membrane, giving us the so-called erosion.

This condition feels not unlike a cancerous infiltration; but upon careful inspection the Nabothian follicles will be seen and a puncture of these nodules and escape of their contents will determine their nature, although this need not necessarily throw out the element of malignancy. The proper treatment of such a condition will soon prove that it is not malignant. An ordinary erosion alone is sometimes very like a beginning cancer, but the application of Churchill's tincture of iodine will soon temporarily cure the erosion. These erosions do not bleed as readily as cancer and their feel is different. This peculiar feel of the cancer is hard to describe, but perhaps it may be compared to the difference in feel between a piece of rough and a piece of glazed paper; the former representing the cancer, and the latter mucous membrane.

These and other points of difference may be brought out, but they are only points of interest, and for all practical purposes we must usually submit a portion of the suspected tissue to a competent microscopist.

One word only, in regard to the diagnosis of adeno-carcinoma of the fundus. We should always bear in mind the fact, that the disease can be far advanced, the cavity perhaps filled with the growth and still be little enlargement of the organ. We should be prompt therefore in all suspicious cases to curette the uterus and in all doubtful cases, refer to the microscope to determine the nature of the disease present.

The prognosis, as far as *permanent* cure is concerned, is bad in cancer of the cervix unless seen *very* early during the microscopic stage and we seldom get them so early.

The cancer attacking the fundus is more favorable if seen in the earlier stages.

The treatment is essentially surgical; if seen early, curative, if seen late, palliative. The pain of the very late stages will usually have to be controlled by medicines, like morphia. If the growth attacks the cervix it is suitable for radical operation providing it has not spread to the vaginal walls and has not infiltrated the broad ligaments at their bases. This infiltration of the broad ligaments is sometimes confused with an old in-

flammatory condition of the tubes with adhesions. There need seldom be any doubt in this matter, if we remember that the cancer infiltration is greatest at the cervix, is continuous with it and gets less, the farther we get from the cervix; while the inflammatory condition should be the reverse, with a distinct sulcus between the mass and the cervix. Cancer of the fundus should be subject to radical operation if the growth is confined to the uterus and even when it has invaded the peritoneal covering, the uterus should be removed providing the intestines are not adherent and invaded with the growth. These late operations may not much prolong the life of the patient, but will often relieve the severe pain. Of course permanent relief from pain cannot be promised. The operation that gives the best result is still unsettled. Some advocate abdominal hysterectomy for all varieties of uterine cancer; others advocate the vaginal route, and still others would operate cancer of the fundus by the abdominal method, and of the cervix, by the vaginal method.

Personally, I have come to avoid the opening of the abdomen of *very* stout women if the vaginal route is at all feasible.

Gynecologists have been much disappointed over the results of the complete radical abdominal operation with removal of the pelvic glands. Theoretically, like cancer of the breast, it should give the best results, but after a trial of some ten years it is conceded by nearly all, that there is little if any advantage to be gained and as the operative mortality is immensely increased, it has been abandoned by many. The best results seem to be attained by as complete a removal of all local or adjacent tissue as possible. If the glands are involved, the case is hopeless.

Next in importance to the curative operation, is the palliative operation with local treatment of the diseased structures and the medical treatment.

The principle of the local treatment is to rid the patient of bleeding, discharge, odor, and absorption of septic material. This is usually best accomplished by a thorough curettage, followed in some cases by the actual cautery, and this curettage requires in some instances all our skill.

We wish to remove all broken down tissue so as to get a clean base and at the same time, we must be extremely careful not to enter the bladder, rectum or pelvic cavity. The natural

course of the disease may do this; but it is an unpleasant result of an operation intended to make the patient more comfortable.

The curettage can be repeated during the course of the disease if necessary, or after once having obtained a clean surface it may be kept so by the occasional application of a mild caustic, thus producing a slough of the broken down tissue. Monsels' Salts can be applied for this purpose, as can also twenty-five to fifty per cent. solutions of chloride of zinc on pledgets of cotton, care being taken to protect healthy parts from its action. Other methods can be employed; but all are directed to the same end.

Antiseptic vaginal douches can be used to reduce odor and discharge; among the best being permanganate of potash and peroxide of hydrogen.

In conclusion, I wish to re-iterate that the object of this paper is to stimulate all to make a diagnosis in cases presenting themselves with uterine hemorrhage, especially if it be at, or about, the cancer age and I wish all could read the section of an address by J. Knowsley Thornton before the British Medical Association, July, 1895, and quoted by Cullen, in his work, "Cancer of the Uterus." Although this address was delivered ten years ago, I think it still expresses the feelings of the modern gynecologist upon this subject.

BERBERIS VULGARIS.

BY EDWARD CRANCH, PH. B., M. D.

(Read before the Homœopathic Medical Society, of Pennsylvania, Sept., 1905.)

PRESENTED ON BEHALF OF THE HOMEOPATHIC MEDICAL SOCIETY OF ERIE COUNTY.

IN presenting this rather ordinary drug, its natural history and provings will be passed over, and only its clinical relations described, as verified by members of the Erie County Society.

Berberis Vulgaris has proven useful in a class of cases having chronic evidences of a diathesis variously known as latent gout, lithæmia, or uricacidæmia, a diathesis affecting, in one form or another, one-fourth or one-third of the human race.

In the climate and water supply of the great lakes, occasions for the use of *Berberis* frequently arise, and the drug is an important one to know.

Berberis cases often have histories of gravel, old eczemas, joint affections, pruritus, stomatitis, hemorrhoids, ophthalmia, and other conditions common to the "Psora" of Hahnemann. For Hahnemann, while he knew all about scabies and the itch mite, the "*Sarcoptes hominis*," as proved in his "Lesser Writings," did not, as asserted by John K. Mitchell, of Philadelphia, declare that the "origin of all chronic diseases is in the itch." See Vol. VII of Cohen's System of Physiologic Therapeutics, on page 79, where in treating of Osteopathy, Dr. Mitchell uses the following remarkable language, showing at once the bitterness of party spirit, and the limitations of his information:—"In short," he says, "we have to deal with a new 'pathy,' that is to say, with an exclusive system, founded on one idea: an idea, to be sure, rather more rational than that now-abandoned theory on which another exclusive system was built,—namely the origin of all chronic diseases in the itch."

As we all know, Hahnemann, after excluding the miasms of syphilis and sycosis, or the "fig-wart" disease, one of the forms of gonorrhoea, used the Greek word "Psora," meaning thereby any itching eruption, and not only the itch of scabies, and grouped under this one term most of the diatheses which we now know as tubercular, cancerous, lymphatic, and, chiefly, lithæmic, for the simple reason that all these miasms were apt to be attended, mostly in their early stages, by an itching eruption, the suppression of which was often followed by very disastrous later complications, as we sometimes witness at the present day.

If for "anti-psoric" we read "anti-lithæmic," we may get a clearer idea of the value of *Berberis*, as well as of other so-called "chronic," or "anti-psoric" remedies.

Future pathology may make still newer generalizations possible, but the present generation of doctors will, if they choose, understand what we mean here and now, and what Hahnemann tried to tell us, as well as the pathology of his day permitted.

Berberis vulgaris, in accordance with the Law of Cure, is always to be thought of when there is a history of gravel, or of rheumatism, or stiffness of joints, the special or "keynote" pain being found over the right kidney, radiating forward over crest of right ilium.

All Berberis pains will radiate in neighboring parts, are not affected by moderate pressure or movement, but are worse in certain attitudes, especially in prolonged standing, as with dentists, barbers, counter-clerks, trolley motoneers, and others of like occupation.

The Berberis pains often act like lumbago, and are worse on active exercise, as well as on first rising: with sometimes temporary relief after brief exercise, but severe aggravation from continued motion.

Berberis here differs from two of its related remedies, *Rhus toxicodendron*, which has relief from pain on prolonged exercise, but the exercise is brought to an end by weariness; and *Ferrum*, where there is complete relief for a long time, after moderate motion.

As in gout, the metatarsus and metacarpus are often the seat of pain as if sprained, but for regular acute arthritis, with fever, *Sabina* or *Colchicum* are indicated oftener than *Berberis*.

Kidney colic is relieved, and gravel expelled, under the action of *Berberis*, while the urinary secretion is always increased when its action is favorable.

Berberis acts well in fleshy persons, good livers, but with little endurance. In gall-stone colic its action is less often indicated than in affections of the kidney.

An often verified symptom is a nervous sensation as of a tight cap pressing upon the whole scalp.

In common acne, *Berberis vulgaris* has been successfully employed.

In one case of severe peritonitis, in a young farm hand, suffering from exposure to cold and wet, the remedy, after a day or two, was found to be *Berberis*, by noting the dense deposit of mealy sand, true grit, accumulating by the spoonful in the urine. *Berberis* in tincture, in water, cleared up the whole case in a very few days. The man died two years later from volvulus, brought on by a strain. The diagnosis of the point of obstruction was made by electricity passed through the intestine after this had been filled with water in the attempt to restore peristalsis, but an operation was refused, so the diagnosis was only confirmed *post mortem*.

The *Berberis* seems to act best in the tincture and the lower potencies, but some cures of chronic rheumatism have been noted from the 200th.

It must not be confounded with the *Berberis aquifolium* of Oregon, a quite different plant, an excellent anti-syphilitic, also valuable in acne, but of no special value in rheumatism or gravel.

It has, however, the symptom of a band about the head above the ears, not the full cap sensation of *Berberis vulgaris*.

The chief rival of *Berberis* is *Sepia*, which, however, has a much wider range of action, and affects the whole system more profoundly. The special action of *Sepia* is less on the kidneys and ureters, and more on the bladder and urethra.

Lycopodium covers much ground in lithæmia, but has still closer relationship with the tubercular diathesis, covering more of the respiratory and nutritive changes, which are hardly touched by *Berberis*.

Lithium is perhaps contained in the juices of *Berberis*, at any rate its action is in many ways similar, except that it deals more actively with the heart and other organs above the diaphragm, while *Berberis* acts chiefly below that muscle.

Ledum palustre is also related, but has more chilliness and less backache.

THE STATUS OF THE CONSUMPTIVE.

BY FRANCIS W. BOYER, M. D., POTTSVILLE, PA.

(Read before the Homœopathic Medical Society, of Pennsylvania, Sept., 1905.)

I SHOULD like to say at the outset that this paper is the result of investigations by others, and has been compiled from medical journals and other sources too numerous to mention in particular.

In presenting this subject, my object is to call the attention of this Society to the rapid advances made in the care of consumptives since the theory of fresh air and nutrition was first declared about 1860, as the one successful means for combating the disease. At that time it appeared that some special element of nutrition provided with some curative balsam was needed. Cod Liver Oil, rich in Iodine, Bromine, etc., was the cure-all. Whiskey was recommended *ad libitum*.

Many intelligent physicians recognized at that time that nutrition, in whatever form it could be given and assimilated, afforded the way out from the depression which preceded the

outset of the dreaded disease. Fresh air and out-door living were also recognized as factors in the prevention and cure of this prevalent malady. A case much quoted at the time was that of a gentleman, a pronounced consumptive, and his family setting out from New Haven, and making the tour of the New England States in a vehicle, camping at night; they spent the entire summer in this way; the father returned cured and the family gained in health. To-day this is no longer an isolated instance.

Medical journals, the public prints and bulletins issued by the State all tell of out-door living, nutritious and easily assimilated foods, the care of the person, associations and housing.

This constitutes the theory of healthful living, and is not only a preventive of consumption, but a safeguard against all the ills human flesh is heir to.

The attention directed to the study of this subject has wrought other than good.

For who can deny that with a fully nourished system and a wholesome body that the resisting power to disease is at its highest.

Since 1861 the death rate from tuberculosis has been reduced 45 per cent., with us the greater percentage since 1890.

In many minds fear is aroused, and fear begets apprehension, selfishness and cruelty, cruelty to the verge of ostracising the poor consumptive victim and often causes his neglect.

Statistics show a condition indeed alarming. Reliable authorities declare that 100,000 of our population die every year of tuberculosis. Multiply this number by three, and we have a very moderate estimate of the number in this country incapacitated by the disease. Every other adult among American negroes is destroyed by it, although it was almost unknown among the slaves, and in Africa is found only where there is contact with the whites.

One-half of the deaths among the American Indians are also attributed to this disease. Sisseton Indians are likely to be exterminated by it. Chinese in this country are also afflicted, and among them the death rate is very high.

Among the foreign races the Irish lead all other Europeans with Bohemia and Scandinavia a long way behind. The Hungarians, Russians and Poles are mostly Jews, who on account of temperate habits, food regulations and forty centuries of

racial existence are comparatively immune. So many Italians return to their own country to die, and are so disposed to conceal cases that among them statistics are unsatisfactory. One-third of the deaths of persons between twenty and thirty years of age in Brooklyn are said to be due to phthisis.

Paul Paquin states that the total deaths of all the wars of the nineteenth century is estimated at 14,000,000 persons, and of tuberculosis at 30,000,000. It invalidates each victim one to two years with a probable financial loss of over \$76,000,-000.00 annually.

In Pennsylvania there is a tuberculosis population of about 70,000 and in Philadelphia of 15,000.

In the face of these numbers and of the fact that whole families become involved, and that physicians pronounce the disease contagious, it is not strange that the public has been aroused to interest in a class who form so large a part of its members.

In the past, even in the recent past, the status of the consumptive was an object of pity as afflicted with an incurable disease; then a source of infection to be shunned, and only lately as a reasonable object of a physician's skill. Years ago a physician gave his diagnosis as a judge, his sentence to the condemned; the difference was that the State provided the criminal with some degree of physical comfort in his last days.

To the medical profession in part is due the unreasonable fear called Phthisiphobia. When a disease is called contagious, the source of contagion should be clearly explained, and the method of protection taught.

One effort at self-protection was to send consumptives to another climate, and vigorous protests are coming from physicians in the South and West against sending the hopelessly ill away from home and friends, without means to obtain even the necessities of life. (It is similar to a policeman's "move on.")

Since attempts have been made at segregation in sanatoriums, objections are made to this humane effort as depreciating the value of property, and menacing the health of the locality. At Mt. Airy such objections were carried to the courts. The same measures were resorted to to prevent the establishment of a sanatorium in the Shawangunk Mountains to provide for the poor of New York.

A movement is on foot to prohibit patients at White Haven from entering the town. In Jersey City the Board of Health was urged to compel railroads that transport patients to the State Sanatorium to provide special trains and boats for their use, and to forbid them using station rooms and passageways provided for the general public.

It is not the purpose at this time to discuss the treatment of consumption, but the treatment of the consumptive. We are learning that change of climate, once thought so necessary, is only an adjunct. While some climates are more favorable than others toward a cure, we may make use of the hygienic-dietetic treatment in our own locality.

We have learned, moreover, that isolation is necessary only when diseased tissues are being thrown off, and the patient cannot or will not properly dispose of them.

The interest of the profession in this subject is shown by the organization of committees, and the American Anti-Tuberculosis Congress which met in Atlanta, Ga., in April last. There were about five hundred physicians in attendance from nearly every part of the United States east of the Rocky Mountains.

In May the National Association for the study and prevention of Tuberculosis met in Washington, when the consumptive was considered in his sociological, pathological, chemical and climatological aspects.

The Maryland Society for the Prevention of Tuberculosis decided to instruct the public in regard to prevention. They hope to effect this through a methodical system of lectures, leaflets and meetings. In this direction thirteen public lectures were given last winter, which were attended by about fifteen hundred persons.

The White Haven Sanatorium conducted an exhibit at Philadelphia for the purpose of interesting the philanthropic. This exhibit consisted of photographs of the buildings, a tent outfit, a properly equipped room for tuberculous patients, and the various articles used in the practical prevention.

There are in all thirty-nine associations in this country having in view the same object as those above mentioned. We must look to these associations for the most active and scientific measures for suppressing tuberculosis and ensuring for its victims the most natural life possible.

They not only seek to care for advanced cases, but to prevent infection, and to instruct the public to combine wisdom

and mercy. They study climates and occupations; so incipient and cured cases may follow a normal manner of living. Sanatoriums and dispensaries follow as a natural result.

In Washington, where the National Association met last May, the death rate from consumption is the greatest except Denver and Los Angeles.

A noteworthy sanatorium is the Adirondack Camp for favorable types. The uniform charge is \$5.00 a week, but a free bed fund makes a prolonged stay possible. It was begun in 1885 in a one-roomed cottage, heated by a wood stove and lighted by a kerosene lamp, and has grown to a small village of twenty-one cottages, an infirmary, a pavilion, a chapel, a library and a post office. In the first years there was difficulty in inducing patients to go to it, but now not one applicant in twenty can be admitted.

California has no State sanatorium, but at Indio, Mr. Nelson, of St. Louis, has bought 200 acres at the entrance to the Great Desert to care for such patients. The locality is twenty feet below sea level and is protected by mountains from rain and fog; the average rainfall does not exceed one inch, and all winter days are comfortable. The capacity is practically unlimited, as seventy-five acres are under cultivation. Hospitality is extended to whole families and provision is made for a home for convalescents. No one is excluded on account of wealth or poverty. Those able to pay are charged \$1.00 more a week for the use of a furnished tent and \$3.00 for board. The work on the farm is largely done by the able bodied members of the community.

Among the many good deeds of the New York Commission for improving the condition of the poor is the Seaside Tent camp for children at Coney Island (which the President recently visited.) This is an experimental sanatorium, the first of its kind in America for the treatment of non-pulmonary tuberculosis in children between the ages of three and ten years. It is designed as a demonstration and is not permanently established. Major surgical operations are not a feature; the design is to show that hygienic living may sometimes render them unnecessary.

At Foster, Rhode Island, a farm of fifty acres is used as a camp, capacity twenty-five in winter and sixty in summer. To solve the problem of expense, abandoned trolley cars have been utilized as bed rooms.

The Cigar Makers' Union advocate the establishment of farms and camps for such of their members as are afflicted.

The only provision for those ill is a tent ward in Asylum Hospital for the poor of the district. This accommodates thirty-four patients.

Thirty-four States (including the District of Columbia) have some sort of institutions for patients, either established or nearly completed. There is also one at Honolulu. These accommodate a few over 8,000 patients; from 8,000 to 8,400.

There are 135 institutions in the United States and Canada, of which one-third are in New York and Pennsylvania. Fourteen were established in 1902; twenty-four were established in 1903, and twenty-one were established in 1904.

The beneficial results of sanatoriums have been demonstrated in London, where in forty years that measure and no other reduced the death rate one-third. (?) Prejudice against sanatoriums is due to lack of knowledge, advanced cases entering too late, and self prescribing.

In this country the first institution for the care of consumptives was the Channing Home in Boston (1857); next the Cullis Consumptive Home same year. Lincoln Home in New York (1859), and the House of the Good Samaritan in Boston (1861) received incurables of any type. These were for hopeless cases.

The sanatorium for the *cure* of tuberculosis was inaugurated at Saranac, twenty years ago. The first State sanatorium was established at Rutland, Mass., in 1898; New York next, 1904, at Ray Brooke, in the Adirondacks.

In seven other States, Rhode Island, New Jersey, Minnesota, Ohio, Missouri, Michigan and Wisconsin, a beginning has been made. In the others either the measures have been defeated or none have been taken.

The National Government has made provision for only thirty-four patients in the District of Columbia, although the population of Washington alone is over 278,000. A temporary tent camp is located on the grounds of the Naval Hospital in Pensacola for about fifty, and another at Fort Stanton, New Mexico, for seamen of the merchant marine service, light house crews and of vessels other than of the navy. This provides for 225. There is a temporary one at Port Royal, S. C.

An army Hospital is at Fort Bayard, New Mexico, and the Bureau of Medicine and Surgery is now making a study of

abandoned army posts in favorable locations for the establishment of sanatoriums. The proposed locations are in the Adirondacks, North Carolina, on the Pacific Coast, and in the Middle West.

The Y. M. C. A. are also establishing camps in favorable localities. In Pennsylvania the first institutions, especially for the care of consumptives, were the Hospital for Diseases of the Lungs at Chestnut Hill, and the House of Mercy, 411 Spruce Street, Philadelphia. Both were founded in 1876 by the Episcopal City Mission.

Attempts have been made to secure a State sanatorium. So far without success. The State, however, contributes to the support of such institutions as now exist.

Rush Hospital, Lancaster Avenue and Thirty-third Street, Philadelphia, was founded in 1892. So far as I have been able to ascertain, the eight others and the projected one in Pittsburg have all been established in or since 1900. In the General Hospital, Philadelphia, the consumptives for ten years have been isolated in wards. During the summer of 1903, the Hospital roof was converted into a ward, where as many as possible of the incipient cases were kept night and day.

A new building to accommodate sixty, and six pavilions made entirely of steel and glass, to accommodate eighteen each have just been completed.

The Henry Phipps Institute maintains a hospital for advanced cases.

The Lucien Moss Home, and the Dermady Sanatorium at Mt. Airy receive patients in every stage. Any physician may place and treat patients in them. These furnish bed capacity for 418 patients, but we hope in summer at least the out-door capacity is increased.

Through the interest of Dr. Rothrock, our State Commissioner of Forestry, the South Mountain camp has been established at Mont Alto, Franklin county. The accommodations at present are for 38 persons. The land and buildings are State property. There are eleven plain board cabins, ten feet square, intended for two men each, and seven cottages for women, each cottage with two rooms and a small kitchen. Cots and stoves are the only furniture provided; a large assembly room may be used by all. The State supplies shelter, fuel, air and water and requires the observance of certain

rules. Campers provide their own food. A private sanatorium for about ten patients is situated within a half mile of the grounds.

White Haven receives one hundred cases without charge. It is supported by State appropriation and private contributions. The grounds include 215 acres. There is also a pay ward.

These are mentioned as being of special interest. Other institutions are at Greentown, Pike county, Lansford, Scranton, and Sunnyside, overlooking the Lehigh Valley.

Outside of Philadelphia there is provision for about 300, so making a liberal estimate only 750 of our 70,000 consumptives are assured of proper care in fifteen sanatoriums or Houses of Rest.

Seventy-five per cent of the applicants at sanatoriums for incipient cases are refused because the disease is too far advanced to ensure a cure. For this reason physicians are urged to make an early diagnosis (three and one-half months is said by some one to be the average time from the beginning of the disease to the development of tubercule.) Loomis believes the majority of patients, who apparently develop tuberculosis after thirty have had a previous attack.

The statistics given show what the public has done for the consumptive in regard to sanatoriums. It may seem strange, but there is a return benefit from the consumptive to the community where he lives under medical oversight. Far from being a menace to a community, sanatoriums and camps are declared to be so practical a demonstration of hygienic living as to reduce the death rate, and to increase the health of their immediate neighborhood. As however only less than 8,500 of our numerous population can be received as residents in our institutions, the farther reaching work of dispensaries is evident.

There are 31 of these in the country, and their reports show nearly 10,000 patients treated each year. Eleven of these are district offices in the tuberculosis committee system in Chicago.

The Henry Phipps Institute, Philadelphia, (endowed by Mr. Phipps, of Pittsburg) includes a hospital for advanced cases, a laboratory for research and a dispensary where 2,040 persons were treated the first year. Milk is supplied when the physician sees fit. Two nurses are employed to visit homes.

Sputum cups are supplied, and each person receives verbal and printed instructions for his own care and to prevent him from infecting others. The instructions are supplied in two forms, a printed folder for the pocket and a placard for the home.

In New York City, the municipal Clinic prints circulars of instructions in nine or ten languages. Some dispensaries furnish reclining chairs and sleeping bags for out-door sleeping on roofs and fire escapes.

Special care is given tuberculosis patients in fifteen hospitals for the insane and in seven penal institutions.

To ascertain the extent of municipal oversight, the compiler of the Tuberculosis Directory sent letters of inquiry to 78 cities in the United States of more than 50,000 inhabitants. From ten of these no answer even to a second letter was received. We must all regret that four Pennsylvania cities showed this discourtesy, Pittsburg, Allegheny, Harrisburg and Scranton. In the remaining 68, fifty-nine officially recognized the disease as communicable.

In some cities the only effort to efface it, is an ordinance forbidding expectoration in street cars, and it is left to the car conductor to enforce. In only four cities are the ordinances said to be strictly enforced. Municipal control does not mean arbitrary interference by the Board of Health.

In the best regulated cities, physicians are requested, but not always required to report each case. The house is not placarded, but on the death or removal of a patient is disinfected. The city pays for disinfection and the owner for renovation.

The indigent are cared for. New York City furnishes nurses who speak French, German, Yiddish, Russian, Italian, Chinese, Slavak and Polish languages. In New York it has been the custom for the last two or three years to inquire from the physician who reports a case, as to the condition and with the consent of the physician to locate such patients as have passed from his observation and find out their condition. As a result of wise regulations, there has been a more rapid fall in the death rate in New York City than any other city in the world, notwithstanding the crowded tenement district and the large foreign born population.

Dr. Biggs, the medical officer of the Board of Health, says of all the great infectious diseases, consumption is the most preventable.

I should like to use as a conclusion an extract from an ad-

dress by Dr. Devine, read before the National Association for the Study and Prevention of Tuberculosis last May:

"Next to the creation of hospital and dispensary facilities, possibly of even earlier urgency, is the necessity of educating the rank and file of the medical profession as to the need of early diagnosis, registration, and protection from infection by all conservative and reasonable means. And next after these two great undertakings, comes the yet greater, and it may be we should say even more elementary undertaking, to which repeated reference has been made already—the creation of a sound public opinion, midway between indifference and phthisiphobia, an enlightened public opinion in which every one is frightened just enough to act sensibly, and not enough to act foolishly; just enough to insure necessary public appropriations and private donations, but not enough to make it difficult for a cured and educated consumptive to find a job; just enough to cause the railways to disinfect the hangings of a sleeping car, and the cushions of a day coach, but not enough to cause them to refuse to an indigent consumptive girl, on her way to a sanatorium, the charitable reduction which is given to all other indigent persons; just enough to cause the city to build a sanatorium, but not enough to induce the Legislature to permit local prejudice to close county after county to the urgently needed sanatorium, except on a bribe to the county commissioners, and the township trustees. When this happy golden mean of public opinion is to be found in every community, the death rate from tuberculosis will diminish with a rapidity which will enable us to contemplate the speedy dissolution of our association for the prevention of this disease, and will release for the next big task the energy and the financial resources which for the present are imperatively demanded for this above all others."

DETERMINING THE SEX.

BY A. M. CUSHING, M. D., SPRINGFIELD, MASS.

(Read before the Allen Homœopathic Materia Medica Club, of Springfield, Mass.)

TO-NIGHT I enter a field where there are but a few foot-prints; and most of those were made by speculators; and the more foolish the suggestions made the more profitable the specu-

lation. Taking that as a basis you may say, I ought to make a million. In reproduction we can in no way discard the germ theory, and there is one idea we must follow. If you desire good grain you must sow sound, well ripened seed, or germs. Every farmer knows if he cheats in the seed the crop will cheat him. Going from the farmer to the stock-raiser, what may we learn? The riper or more mature the seed or ovum the stronger the animal. And what is the stronger? The male every time; and by this knowledge certain strains or breeds have been perpetuated. There must be a period similar to menstruation, and the cattle breeder watches for that, and if he wishes for a female he takes the first opportunity to secure that end. If a male is wanted he waits till a later day, for a riper, more mature ovum. Look at the fowl. The hen lays eggs of a different size. Does the breeder select the large eggs for a female? Is it something in or outside the egg that influences the size? Having known something of the methods of cattle breeders before I began the study of medicine, for over fifty years I have carefully watched the results in the human. In what might be called a large obstetrical practice and a careful study of the cases, I believe that if conception takes place before or at the beginning of menstruation, it will be a female, and if after menstruation, and the later the better if it does take place, it will be a male. I have noticed this, if a child is born a few days before expected (except in accidental cases) it will be a female. If some days later than was expected it will be a male. I have attended a lady when a boy was born and a year or more later, without the menses having appeared, a girl was born. I had one peculiar patient. She was so determined no child should be born, at every menstrual period she examined the flow till she found the ovum. She said she always found it. Imagine her surprise and disgust when a menstrual period returned there were some symptoms of its return, but nothing more. Nine months from that time a girl was born. She had no more. In my practice I have had an opportunity to make some quite correct observations. In one family where I was the attending physician, the mother was anxious all her children should be boys, and the father did not object, and my opinions were a law to them. At three different times I expected my services would be required at a certain time and the nurse was engaged for that time, and at each time we met as expected, and each time it was a boy. At one

time a prominent gentleman asked me if I believed the sex could be pre-determined. He was the father of two girls. I told him yes, and gave him my views. Later a boy was born. In relating this to a well-known gentleman the father of two girls; he said that interested him as they had hoped one of the children would be a boy. He said the opinions of his wife were exactly the opposite to mine. I told him that explained why both of the children were girls. About a year later a boy was born. Some cases may be quoted that seem to disprove my theory, but there are often uncertainties in such cases, but all other theories have been mostly failures. It was suggested that there might be a medium line and that may account for the manly woman or effeminate man.

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, M. D., BALTIMORE, MD.

BERBERIS AQUIFOLEUM.

The active principle is berberine.

Physiological Action.—In overdoses in some cases the agent produces tremor of the limbs, lack of muscular power, dullness of the mind, drowsiness and active diuresis. It is not a poisonous agent.

Its influence upon the secretion of the entire glandular structure of the digestive and intestinal tract is steady, sure and permanent, although not always as immediately marked as some other agents.

It stimulates all the glandular organs of the body. It stimulates digestion and absorption, and thus improves general nutrition. It materially stimulates waste and repair.

The agent is classed among the alteratives, and its alterative properties stand first, but its pronounced tonic influence will be quickly observed. It overcomes weariness, "that tired feeling," produces a sense of vigor and general improved tone and well-being.

Specific Symptomatology.—The specific action of this agent is in scaly, pustular and other skin diseases due to the disordered condition of the blood. It is the most reliable alterative when the influence of the dyscrasia is apparent in the skin. It is

given freely during the treatment of skin diseases where an alterative is considered an essential part of the treatment.

Therapeutic Action.—It has cured persistent acne when no local treatment was used. It contributes to the removal of pimples and roughness and promotes a clear complexion, a soft, smooth and naturally moist skin in sensitive young ladies, when the cause is not a reflex one from ovarian or uterine irritation, or menstrual irregularity.

It seems of especial value in scaly skin diseases and in disorders of a non-inflammatory type, and yet it works nicely in some cases of the moist variety.

It has cured many cases of salt rheum even when the symptoms were chronic in character and greatly exaggerated.

In eczema capitis, eczema genitalis with pruritis, and in scaly eczema of all kinds it has acted promptly and surely.

It has cured chronic cases of scald head, so-called, in a few weeks, restoring tone and vigor to the hair.

In psoriasis and in pityriasis it has won praise from many. For dandruff it has been given internally and has produced cures in a number of cases.

In many instances various forms of chronic dermatosis have yielded to its influence when other treatment has failed.

It should be prescribed in glandular indurations and chronic ulcerations, both of a scrofulous and syphilitic type, giving excellent results in these cases. It is lauded highly in syphilis.

It acts as a tonic and corrective to disorders of the liver, an influence that has been often remarked when given for skin diseases.

BERBERIS VULGARIS.

The alkaloid, berberine, exists in a number of other plants.

The acidity of the leaves and fruit is due to the presence of oxalic acid.

Physiological Action.—Berberis in moderate doses produces feverishness, inflammation of the mucous membranes from the throat to the intestines, and dysentery. It causes also a high degree of inflammation of the kidneys with hematuria. It seems to act with much force upon the venous system, causing pelvic engorgements and hemorrhoids.

Berberis seems to depress the functional activity of the brain as the organ of mind; the powers experienced listlessness, apathy, indifference to life, melancholy, weakness of memory,

absence of mind while attending to mental labor and so forth, the muscles and the osseous system were likewise invaded, as is seen from the following symptoms: Heaviness and a feeling of prostration when walking or standing, breaking out of the perspiration after making the least exertion, a feeling of weariness and rheumatic lameness in the limbs, with frequent shaking and trembling of the knees. The sensations experienced in the muscles are: a pressure and tension, stitching, tearing, gurgling or bubbling as if something living were moving through them. Most of the pains and ailments are aggravated or excited by motion.

Blotch-shaped, itching eruptions incline to break out upon the skin, compelling the prover to scratch very hard; at the same time lymphatic swellings arise on the articulations, especially on the tendo-Achillis; this symptom is a characteristic indication for the use of berberis in typhoid fevers, even of the putrid type.

Therapeutic Action.—Berberis is said to be more especially adapted for gastric and bilious fevers; likewise in angina faucium, if the patient complains of a sensation as if he had a lump in his throat; likewise in quinsy sore throat. It may likewise be of special use in various affections of the eyes, in rheumatic and arthritic complaints, no matter what part of the body is the seat of the trouble; in rheumatic inflammations of the chest, hemorrhoidal and menstrual difficulties, varicose swellings, pains in the urethra, and all kinds of ailments which are excited or aggravated by motion.

The true sphere of action for berberis are febrile conditions of a bilious and gastric character, arising from atmospheric influences of a miasmatic nature; hence the rheumatic type of these bilious and gastric derangements, which are very generally attended with symptoms of cerebral irritation developed by a process of reflex action, but not by any means resulting from a primary invasion of the cerebral centers. Anatomically the mucous lining of the liver and its appendages, of the intestinal tract and of the uro-poistic organs constitutes the chief theatre for the action of berberis.

Berberis excites an inflammatory irritation in the lining membrane of the abdominal viscera, liver, intestines, bladder and uterus, and therefore it must be homœopathic to inflammatory irritations of these organs. In the acute form of such irritations, berberis will probably disappoint us; but in *subacute*

irritation of the mucous lining, characterized by such symptoms as are appropriate to the affected organ, such as, burning soreness, lachrymation or suppuration, if the eyes are affected; soreness, heat, dryness, and difficulty of swallowing, in the throat; anorexia, soreness, heat, foul taste, bilious complexion, chilly feverishness, diarrhœic condition of the bowels with griping; watery or mucous discharges from the bowels, if the gastric functions are deranged; sticking and burning or smarting pains in the region of the bladder and in the urethra, with pale-yellow, or blood-red urine which speedily becomes turbid and deposits a sediment; and finally, difficult menstruation, the blood being more like serum, the discharge setting in with chilliness, tearing pains in the whole body, pain in the kidneys, headache, feeling of exhaustion, or a feeling of excoriation in the vagina and pressing pains in the thighs; or stitches in the chest, if the lining membrane of the chest is affected, as if flatulence had become incarcerated in the chest, here and there; in all such *subacute irritations of the mucous surfaces*, more particularly when accompanied by a sense of feverish chilliness, you may find berberis a very valuable agent. The constitutional symptoms which accompany these irritations, are a feeling of weariness, the patients complain that they feel draggy, sore, rheumatic, low-spirited, and not disposed to do anything or to stir about.

Jaundice.—Berberis is recommended for jaundice when the following conditions are present: Spells of icterus, with pale, tough alvine discharges, or profuse acrid, watery diarrhœa; urine dark, turbid, with copious sediment; morbid hunger, alternating with loathing of food; or great thirst, alternating with aversion to all kinds of drink; constant, troublesome bloating of the abdomen, with occasional forcible and noisy expulsion of flatus.

Remembering, that the *totality* of symptoms furnishes us the key to the selection of the right remedy to a given case, we can see that berberis may be found useful in headache, sore eyes, angina faucium, bilious dyspepsia, chronic gastro-enteritis, chronic diarrhœa, chronic constipation.

Enuresis.—It is also a useful remedy in irritable bladder and in enuresis, when the following symptoms are present: Violent stitching pains in the bladder, extending from the kidneys into the urethra, with urging to urinate; frequently recurring crampy pain in the bladder; cutting, constrictive, burning pain

in the bladder. Urine pale yellow, with a slight transparent, gelatinous sediment, with no deposit, or a turbid, flocculent, clay-like, copious, mucous sediment, mixed with white or whitish-gray, and later a reddish mealy sediment.

BISMUTH SUBNITRATE.

Physiological Action.—It is a mild and soothing agent in its local influence upon the skin and inflamed mucous surfaces. Internally its influence is confined almost exclusively to the gastro-intestinal mucous membranes.

The agent is not entirely devoid of toxic properties, when applied very extensively to large, open wounds. It sometimes produces poisonous effects owing to a not uncommon adulteration with a salt of arsenic. It has produced gastro-intestinal irritation and symptoms of arsenic poisoning. Desquamative nephritis with albuminous urine has occurred from its free and long-continued use.

In all cases when its use is persisted in, it produces a greenish or black discoloration of the bowels, and an odor of garlic upon the breath which is due partly to the presence of tellurium.

In a case of poisoning, we evacuate the stomach and then use albuminous and emollient drinks, such as milk. If inflammation has set in, we resort to aconite.

Therapeutic Action.—As an external application, bismuth is one of the most valuable remedies. It forms a most perfect dusting powder for chafings and excoriations especially in young infants. It is applicable also to the skin of the face when easily chapped or when sensitive from shaving, and to chapped hands.

Incorporated in an ointment of lanolin, it is excellent applied to cracked and fissured nipples. It should be kept constantly applied, any excess being wiped off before nursing, and the ointment fully reapplied afterward. This ointment is most superior as an application to *superficial burns*. After the pain and heat is reduced by the application of a carbonate, if this ointment is kept constantly applied to the burned surface, the healing is very rapid and the cicatrix is in some cases scarcely perceptible, usually no contraction of tissue taking place.

Although antiseptic properties are not ascribed to the remedy, pus is not likely to form when it is used. Where an ac-

tive antiseptic is needed, boric acid may be incorporated with it. An ointment of this character is applicable to *eczema* of the moist variety. If applied, and the surface closely covered, healing in some cases takes place rapidly. In *eczema* of the *scrotum* and *anus*, this agent is applicable, and in *piles* of an acute or sub-acute character, it renders excellent service. It is applicable to *fissures* of the anus and to *ulcerated conditions* within the *rectum*, especially if there are offensive and irritating discharges.

In *Gastrodynia*, accompanied by symptoms of cerebral derangement, such as frontal headache, vertigo, humming in the ears, and perhaps by inflammatory irritation of the conjunctiva, bismuth is a most valuable agent.

It is of the greatest use in *painful digestion*, or a kind of *gastralgia* which comes on soon after eating. The pain is peculiar; it is a *remittent pressure*, as from a stone or some heavy substance in the stomach. Some describe it as a *crampy* pain, others a *gripping*. It differs from the *gastralgia* of *nux vomica*, which comes on later after eating; from *carbo. veg.*, which is still later, as well as burning. The only medicines which closely resemble it, in the nature of the pain, are *dioscorea* and *calabar*.

This *gastralgia* of bismuth is often attended with eructations, tasting of undigested roast meat, frontal headache, vomiting of undigested food; but these are unnecessary concomitants.

In *vomiting from gastric irritation* it is an excellent remedy. The vomiting is not attended by fever, is generally chronic, or has followed acute gastritis, or has been caused by irritating drugs. It is not useful in vomiting of sour, ropy fluids, or when inflammation is present. It will often palliate the vomiting from cancer, or ulcer of the stomach; also the vomiting of pregnancy, when the *reflex* has caused *local* irritation of the stomach.

Dyspepsia.—In the treatment of dyspepsia or painful digestion, not complicated with any liver affection, it is almost indispensable. It acts curatively, when there is sweetish, metallic taste; thirst for cold drinks, with immediate vomiting of cold water taken; burning and pressure in the stomach after eating, confined to a circumscribed, narrow spot, forcing the patient to bend backward; nausea; flatulency; eructations of offensive odor; constipation or offensive diarrhoea.

Dr. Hale's plan is to give the bismuth, if indicated, just before eating, and pepsin with the last portion of the food taken at meals, followed by the bismuth again in half an hour, if the *pain* and distress come on.

Dr. Hale recommends the first decimal trituration of the *subnitrate of bismuth*, giving to adults ten to twenty grains, to children half the quantity.

In *Headache* it is an excellent remedy when it alternates with or is attended by gastralgia, or when it comes on immediately after eating, and is relieved by vomiting of the ingesta. The pain is generally *frontal*.

Prosopalgia.—Bismuth is indicated in prosopalgia when the pain is excruciatingly severe, relieved by taking cold water into the mouth, aggravated when it becomes warm; better from moving about.

BARYTA MURIATICA.

Physiological Action.—Small doses produce increased secretions of urine, and tendency to perspire and loose stool. Larger doses cause symptoms of irritation, nausea and vomiting, griping and purging, feverishness, dryness of the tongue, giddiness and muscular debility. Sometimes catarrhal discharges from the eyes, nose and ears are excited. The muscular debility sometimes amounts to paralysis and trembling. A poisonous dose may produce convulsions, pain in the head, deafness and death. A post-mortem examination, in cases of poisoning, shows that the cerebral vessels are turgid with blood, the mucous membrane of the digestive canal is inflamed throughout its whole extent, with extraordinary contraction of the colon down to the rectum; the liver, spleen, lungs and heart contain a thick, black blood.

The muriate of baryta first acts upon the brain and nervous system and upon the heart, causing paralysis of the brain and coagulation of the circulatory fluid.

Antidotal Treatment.—The antidotes to this salt are the sulphates, which form therewith an insoluble sulphate of baryta. You may employ the sulphate of soda or magnesia. Of course, the poison should be removed from the stomach as speedily as possible, by means of an emetic. Guided by the known effects of the muriate of baryta, we may recommend it for

Scrofulous Swellings, induration and inflammation of glands, also of the testicles.

Inflammation of the mucous coats of the stomach and intestines with violent colic, diarrhœa, feverish flashes, flashes in the face, efforts to vomit.

Ptyalism, with looseness of the teeth, swelling of the salivary glands and palate, odor from the mouth, resembling mercurial fœtor; it may therefore prove antidotal to simple, uncomplicated mercurial ptyalism.

Irritable Bladder.—Baryta has caused violent and continued urging to urinate, the urine very frequently involuntary and with a good deal of pain. Baryta also causes increased, but painless, secretion of urine, which deposits a whitish sediment.

Scrofulous Eruptions, crusty tetter, scaly herpes, tinea capitis.

Dropsy after scarlet fever; it excites diuresis, and may remove the difficulty by establishing a critical discharge of the fluid.

BARYTA CARBONICA.

This medicine is recommended for scrofulous swelling, induration and suppuration of glands, chronic sore throat; it is said to be a good medicine for old people suffering from loss of mental vigor and of physical energy.

Physiological Action.—The following case of poisoning with this agent shows its narcotic character: A young woman swallowed half a teacupful of the powdered carbonate; in two hours she had dimness of sight, double vision, ringing in the ears, pain in the head and throbbing in the temples; a sensation of weight at the epigastrium, distension of the stomach and palpitation. Subsequently she had pains in the legs and knees and cramps in the calves. A day or two after, the cramps became more severe.

These symptoms, slightly modified, continued for a long time. They show that the first action of baryta is upon the brain, whence it extends to the peripheral nerves.

Dr. Hoyne gives the following characteristics: Mental or physical weakness. Fear or dread in the presence of others. Imagines himself criticized or laughed at, which causes great unhappiness. Suddenly overwhelmed with apprehension of evil, cries out that his family or friends are ill, which causes great distress. Anxious about the most trivial affairs. Forgets what was just said, just done, or what he was going to do or get. Sensation as if the brain was loose—seems to move

to and fro on motion of the body; feels stupefied as if benumbed. Right side of the head feels burning hot; in reality it is cold to touch. Formication of the scalp; sensation as if the hair stood on end. Loosing hair from the crown of the head. Cannot bear to look at one object for any length of time; sparks before the eyes in the dark. Sounds in the ears, as echoes, cracklings, reports, etc. Diseased condition in the region of the posterior nares, especially if the patient be troubled with frequent epistaxis. Formation of scabs in the posterior nares and behind the base of the uvula. Chronic induration of the tonsils. Prevents suppuration in tonsillitis. The throat looks pale, is sore, with putrid breath. Sore throat, etc., with difficulty in moving the lower jaw. Painful swelling of the submaxillary gland. The passage of foods to the stomach is painful, as if it passed over a sore spot. Sore feeling at the stomach, even when at rest. Diarrhœa, with pain in the small of the back. When convalescing from pneumonia sensation as if the lungs were full of smoke—she smells pine smoke. The soles of the feet are painful when walking, on account of callosities (calc.). Fetid sweat of the feet (Sil.). Scarlet fever with enlargement and induration of the glands of the neck, and much pain in the ears and head. Fatty tumors especially of hard drinkers. Constantly weak and weary, wishes to lean on something, to sit or lie down, and still feels weak and weary. Very well adapted to persons who take cold easily, resulting in sore throat. Perspiration on one side, as, one hand, one foot, one side of face, etc. Suitable to scrofulous children who do not grow. Especially suitable to dwarfish women with scanty menstruation and troublesome weight about the pubes in any position.

Baryta is especially suitable for the affections of infancy, and more particularly still for those of old age, when there is mental or physical weakness. Marasmus senilis, childish and thoughtless manners (in old people), want of clear recollection, sopor, sleep full of internal uneasiness, with groaning and murmuring, immovable pupils; dim, somewhat reddened eyes; circumscribed, dark redness of the cheeks; cold hands with blue spots; weak, somewhat accelerated pulse, frequent micturition, constipation; stooping posture when sitting, inability to speak a word or to stretch forth the tongue.

In *Paralysis* of old age many of these symptoms are found.

In *Apoplexy*, also, of old people, baryta carb. has proved it-

self valuable, more particularly in old persons who have been addicted to the use of strong drink.

Asthma.—Raue recommends the remedy in asthma, especially in old people, fat and with light hair; aggr. in wet weather and warm air; frequent, copious urination and *paralysis of the tongue*.

Under the eye symptoms of baryta we find the following: Soreness and weariness of the eyes, with pressure. Pressure deep in the eyes, which grows worse by looking at one point, or upward and sideways. Agglutination of the eyelids. Everything seems as if in a fog. Black spots before the eyes. Sparks before the eyes in the dark.

We employ the baryta in scrofulous inflammation of the eyes and eyelids, and in amblyopia of old people.

Baryta carb. has caused drawing, stitching, tearing and boring pain in the ears; otalgia. Eruption on the ears. Roaring and buzzing in the ears; hardness of hearing.

Baryta has also caused an increased sensitiveness of the sense of smell, dryness of the nose, and fluent coryza.

Tonsilitis.—In the treatment of tonsilitis this remedy has established quite a reputation, and while a few practitioners deny that it prevents suppuration, the great bulk of testimony seems much in favor of its power to arrest the disease, even in the later stages. The right side seems more particularly affected; the very tendency to the disease and to suppuration is an indication of the remedy.

In *Chronic Enlargement of the Tonsil*, especially in children of fair complexion, of scrofulous taint, after an attack of quinsy or as a sequela of scarlatina, this remedy is of great value.

Coughs.—Baryto has cured coughs, with pressure on the chest; tickling and dry cough. Also loose cough with saltish, starch-like expectoration.

We have often found Baryta carb. to act nicely in coughs, where there existed a catarrhal state of the whole mucous membrane with a profuse discharge of thick, yellow mucous; soreness in the nose, sensitiveness of smell and formation of scabs in the posterior nares and behind the base of the uvula.

Skin Diseases.—Baryta is a valuable remedy in the treatment of certain skin diseases. The indications are mainly constitutional. It is adapted to the scrofulous diathesis, to young children and to aged people; to the phlegmatic tempera-

ment, to persons of a dwarfish stature, to those who take cold easily and suffer, in consequence, from inflammation and enlargement of the tonsils, and who have fatty tumors about the neck. It is an efficient remedy in

Affections of the Scalp, with moist crusts and falling out of the hair.

Fatty Tumors.—It is recommended highly in the treatment of fatty tumors, no matter upon what part of the body they occur. These tumors are quite frequent in persons addicted to strong drink. Baryta 200, has not yet failed to cure.

DRAINAGE IN ACUTE OTITIS MEDIA.

BY CHARLES M. THOMAS, M. D.

(Read before the Homœopathic Medical Society of Pennsylvania, September, 1905)

I AM led to the writing of this brief paper by a number of recent experiences with acute otitis media where from insufficient drainage, more or less unpleasant conditions have arisen.

Of these I will cite the following:—

(1) Grippe followed by earache. Attendant had ordered Mullen oil, internal remedies and hot salt bag.

After three days of suffering, appearance of watery fluid at meatus with relief of pain.

Discharge promptly became purulent with renewal of pain followed by fever and tenderness over mastoid.

Examination showed foul musty smelling pus in canal. Removal exposed small perforation at middle of m.t. A free L shaped incision to bottom of membrane was made and prompt abatement of symptoms followed.

Error. Delay in drainage and lack of cleanliness.

(2) Small boy had sore throat and earache after long bicycle ride against cold north wind.

After two days of usual remedies severe pain and fever, thin discharge and relief of suffering.

Pulsatilla had been given internally but no local applications; the patient not permitting.

In 24 hours repetition of earache, discharge continued for five days previous to my visit, each night great suffering with

moderate relief during the day—patient hollow eyed, feverish and irritable—Pin hole opening in posterior inferior segment of drum.

Free opening with antiseptics, gave immediate relief and prompt recovery.

Error. Reliance on insufficient perforation, though well located.

(3) Intense pain and prostration. Drum punctured by attendant three times with relief for twelve to twenty-four hours after each operation. Mastoid became painful with tenderness and oedema. Found opening in drum small and high.

On account of urgent mastoid symptoms not only enlarged perforation in m.t. but also opened mastoid antrum evacuating considerable pus. Cure prompt.

Error. Opening of m.t. by puncture instead of incision and in bad location for drainage.

(4) Physician, believing in internal remedies alone, had suffered greatly from pain and prostration for eight days. Day before my visit a discharge of pus, but no relief of pain, which now involved mastoid. Enlarged the small perforation and opened mastoid which showed entire destruction of cells. Slow recovery.

Error. Delayed evacuation.

(5) Similar case, no discharge. Brain symptoms. Paracentesis evacuated pus. Mastoid operation showed entire destruction of cells, erosion of roof of antrum, purulent meningitis, death.

Error. No drainage.

When one considers the large number of cases of greatly impaired hearing and chronic foul discharge which yearly follow the ordinary inflammation of the drum cavity, and further when it is borne in mind that by far the greatest proportion of cases of meningitis and practically all cases of brain abscess are of otitic origin, it is surprising that the management of the acute otitis media and mastoiditis does not receive more serious consideration at the hands of the general practitioner.

The idea is certainly too prevalent that earaches are unimportant affections which will take care of themselves.

That there is a distinct element of danger in the so-called conservative treatment of acute otitis media cannot be too strongly emphasized.

On account of the close anatomical relationship between the

tympanum and the naso-pharynx by way of the Eustachian tubes on the one hand and the cells of the mastoid by way of the aditus on the other, any acute naso-pharyngeal inflammation is liable to set up an otitis media from which an inflammation of the antrum is a most natural sequence.

In fact many of us now believe that otitis media is hardly possible without a corresponding inflammation of the antrum.

If the fact is borne in mind that where the drum is inflamed by invasion from the pharynx, the lumen of the Eustachian tube is almost invariably so tightly closed by swelling within its bony walls as to prevent evacuation of a tympanic exudate by this route, it is plain that the tympanum and mastoid antrum may under such conditions present practically a closed double chamber more or less distended with the products of inflammation, which, if they do not organize or undergo absorption, must seek an exit in some direction.

If the exudate fails of absorption or should become purulent, the most favorable outcome lies in the evacuation of the discharge through the m.t., into the external canal.

But unfortunately the drumhead at times fails to give way under the pressure and the exudate finds its way through the roof of the tympanum or antrum to the membranes of the brain or by the mastoid cells to the great venous sinuses, with disastrous results.

When therefore we do not secure by our treatment of the naso-pharyngeal catarrh a prevention of the exudate or its absorption in the prepurulent stage, the case may be looked upon as a surgical one and should be treated on strictly surgical principles i. e., the exudate should be drained through the least important structure, the membrana tympani, away from vital organs or regions, and in such manner as to secure the most complete and permanent evacuation of the cavity.

If this be conceded the only question remaining is as to when and where the drainage opening is to be made, and in what manner.

Briefly, the symptom *pain* will alone in great measure furnish us the indication as to the time for doing a paracentesis.

Although in the pre-exudative stage, paracentesis is not usually called for, it may, when in spite of medicinal treatment the suffering of the patient is great or continuous, prove an important means of relief, and much modify the attack and should be carried out without hesitation, *provided* one is as-

sured that the previous treatment has been such as to place the auditory canal in an aseptic state. I emphasize the word provided, for while we may say that a properly done paracentesis is a harmless operation in itself, there is always present the possibility of introduction to the drum cavity of septic material from the external canal. On this account, if for no other, the management of the early or pre-exudative stage should always include when possible, a careful cleansing of the external canal, and a more or less continuous instillation of a warm antiseptic material such as bichloride of Mercury 1-5000 or preferably a solution of carbolic acid in glycerine 30 to 50 grains to the ounce. This latter preparation is a most valuable one, first, as an effective antiseptic, secondly as an analgesic, and thirdly as a depletor of the drum cavity through its osmotic action.

When no antiseptic has been used in the early treatment, time should always be taken before a paracentesis to make the canal as nearly as possible surgically clean.

The importance in opening the drumhead lies, however, not so much in the relieving of the pain, as in furnishing free drainage to the tympanum; but here again *persistent pain* will furnish us a reliable guide as to the time for action. A considerable quantity of aseptic exudate may lie harmless and painlessly in the tympanum, and later undergo absorption without perforation; but so soon as it accumulates in such quantity as to cause dangerous distension of the drum, and particularly if it become purulent, pain will set in. The more rapid and the greater the distension and possible purulency, the greater the pain. Conversely, continued *pain* means distension and probably purulency, and unrelieved distension means danger to other important structures; and the greater the suffering and prostration, the greater the distension and risk of invasion of other structures and the more urgent the indication for drainage by the external canal.

Deafness, fever, prostration and bulging of the drum head furnish further additional indications for, and certainly add to the urgency of the operation, but I believe them to be secondary in importance to the pain.

When then the careful medicinal prescription, local treatment of the nose and pharynx, and the instillation of hot antiseptic solutions (particularly carbolized glycerine) into the external canal fail to relieve the pain of an otitis, we may con-

clude that the tympanic and possibly the antral cavity is over distended with exudate, and should be opened and drained without delay not only for the comfort, but for the safety of the patient.

And just here, before speaking of the operation itself, let me enter a protest against the too common practice of treating these cases by introducing into the auditory canal, substances for the relief of pain, which may contaminate the lining of the canal and the drumhead such as, poultices, roast fig, roast onion, hot oil and laudanum, Mullen oil, etc., which are of most doubtful efficacy, and serve mainly to befoul the canal and add greatly to the difficulty of properly preparing the surfaces for a safe paracentesis.

I have no doubt but that this little operation would not be so often delayed or omitted, were it not for the difficulty in rendering the procedure painless without a general anaesthetic.

The application to the drum head of a pledget of cotton soaked with a mixture of equal parts of crystalized carbolic acid, cocaine and menthol (Bonain mixture) has in my hands almost invariably enabled me to secure a satisfactory anaesthesia of the parts. To get the best results with this preparation, however, one must make sure that it is made of the pure crystals of each of the ingredients, that the lower end of the canal and the membrane are free of foreign substances, such as cerumen, desquamated epithelium, etc., and that the mixture be allowed to act for at least fifteen minutes—at which time we will find the drum head dull white and so insensitive that we may, except in the case of very young children, carry out the steps of the operation as precisely as though it were being done in the cadaver.

Restless, nervous children will require a general anaesthetic.

As to the operation itself, I believe it most important, first that the incision shall be made very free, and secondly that it be so placed as to secure beyond question thorough drainage without further interference for a considerable number of days.

To accomplish this I make a vertical cut through the m.t. from the upper to the lower edge in the posterior segment and a second horizontal one running into the first from the front near the lower margin of the membrane, forming thus an L shaped flap. When the upper posterior wall of the canal is

boggy and sagging, I prolong the vertical cut upward well into the lower end of the canal beyond the limit of the membrane. The ordinary vertical or crescentic incision, even though free, closes much sooner than the one just described.

After making sure that the drum is thus well opened, all discharge and blood clots are quickly removed with a clean cotton probe and the canal filled with carbolized glycerine 5 per cent. and not again interfered with for twelve to twenty-four hours, except to change as it becomes moist, the iodoform or borated gauze which is to be kept constantly in the outer end of the canal and pinna.

Although I was formerly in the habit of syringing the canal after paracentesis, several times daily with warm bichloride, soda or borated water, I have lately, I think had better results, unless the discharge is very profuse, from carefully wiping out the canal down to the membrane once daily and directing that in the interval there be instilled 6-8 drops of the warmed 5 per cent. carbolized glycerine every 3 to 5 hours.

When, however, the patient cannot be seen frequently by the physician, I believe the syringe should be used 1-4 times daily, depending upon the amount of discharge. In my hands the old piston syringe has been entirely displaced by the safer, cleaner soft rubber ball to be found in every pharmacy. Those of white or grey rubber should not be used on account of the powder of Zinc and Sulphur which comes from the surface.

Black or red rubber may be boiled safely without doing it harm.

To hasten the emptying of the discharge from the drum, gentle Valsalvian or Politzer inflation may be practiced *so long as the opening in the drum head is large*. If there be doubt as to this it is much better to dispense with such aid.

The greater my experience with these cases, the more I am inclined to the let alone plan of after treatment.

In certain cases of unruly children when each dressing has been attended by violent and exhausting struggles, I have abstained from further interference than the gentle wiping away of the discharge from the outer end of canal and the instillation of the carbolized glycerine, and the result has been satisfactory.

THE PASSING OF THE PURE SYMPTOMATOLOGICAL PRESCRIBER.

BY EDWARD R. SNADER, M. D.

(Read before the Homœopathic Medical Society of Pennsylvania, September, 1905)

THOSE who have attained their majority in the harness of medicine, and even the colts in therapeutics, have been sufficiently alive to passing events to note that the day of prescribing upon a purely symptomatic basis is passing away. This is sometimes a matter of wonderment to the tyro, who has been stuffed so full of the wonderful magic of the method and whose imagination has been fired by the reported astounding attainments following upon the choice of remedies from the purely symptomatic standpoint, that it takes him a little while to disgorge his ex-parte created enthusiasm, and view dispassionately the evident iconoclasm of method among many of our school. To the older and perhaps more observant and experienced practitioners the fact of the iconoclasm is no less patent, but they are able to ascribe a host of reasons why this radical change in manner and method should occur and is occurring.

In the first place, and it might as well be stated frankly at the outset, the older heads have had more opportunities than the younger ones of seeing the method hopelessly fail at a crucial point in the sick room, and they have grown overweary of having charged up to them, and of charging themselves, with gross incompetency in the application of the method. Surely, they reason, they cannot always and eternally be in error; they are not always stupid. And even splendid results, occasionally achieved, are not so often repeated as to counterbalance the frequently noted failures. Is the law wrong? Are they wrong? is the query these men put to themselves. Staunch and loyal to the law because propounded by a master mind, because its application in years gone by had wrought such mighty changes in the world of medicine; because of the strenuous, almost fanatical, advocacy of the method by those who presumably knew more about it than the ordinary prescriber; because the method itself, in its *apparent simplicity*, appealed to their inner consciousness as plausible, and because they could see thousands of crude and refined examples of the action of the law of similars in all schools of medicine—they choose to con-

sider that the law of similia is not to blame, but that the method of applying it is defective.

Once having doubted, numerous other reasons for the noted departure from the ancient methods come into the mental view. All of us have realized the stupendous progress made in sciences allied to medicine, and in sciences outside of it, not to see that conservatism in medicine is death. Only the narrowest possible conception of our science can for a second entertain the idea that we are now enjoying the millennium of medicine, the finality of all possible perfection. Such an idea is abhorrent to an observing, thinking, feeling, acting, living doctor. No, the world of medicine feels the mighty impetus of progress as does everything else in science, art, mechanics, and the varied industries. Did we not feel this terrific force we would be dead, even if not buried. Progress, astounding progress, has been made in medicine, but at that, its great achievements in the last two decades are paltry besides those made in other walks of so-called sciences. That progress, however, has changed the front of medicine, in several aspects at least, many times within the last twenty years. The older men in medicine know that kaleidoscopic changes take place before a final settlement of a reputed progress in medicine finds its apparently correct position, and this position is again shifted with each new discovery. What is true to-day may be false to-morrow. New light, new side lights, are flashing ever and anon, changing the entire view point of an apparently settled and fixed truth in medicine. The whole field of medicine and therapeutics has widened. Diagnosis is more accurate; therapeutic measures of all kinds more intelligently applied. Light, here and there, is glinting through the Dark Ages of Medicine. Surgery, Bacteriology, Pathology, Hygiene, Preventative Medicine, Prophylaxis all have materially modified the view-point held by therapeutists a few years ago. Do you think for a moment that during all this progress the Homœopath has been in a state of intellectual catalepsy as regards advances in drug therapeutics? Has not this increased knowledge narrowed the field of applicability of his law? Does he not know that some diseases are now surgical for which he formerly blindly prescribed the medicine symptomatically indicated? Does he not see that many of the cases he once gave medicine for do not need it at all? Does he not apprehend that his greater knowledge of what may be termed

the natural clinical course of disease makes him doubt many of his former supposed therapeutic triumphs? Does he not realize the absolute impossibility of any sane human being mastering the enormous mass of *materia medica* material with which he is supposed to be as familiar as his A B C, if he would be a master mechanic with his drug tools? Does he not sense the fact that the so-called masters left him the monumental and impossible task of *proving* or *disproving* the truth or falsity (for therapeutic purposes) of this overwhelming concatenation of sense, nonsense, vagaries and idiosyncrasies found in the merely schematic *materia medica*s? Does he not soon ascertain indubitable evidence of unwarranted interpolation of symptoms in what should be a sacred "pure" drug proving? Yes, if he is alive, he fully realizes this, and a good deal more.

Finding the field of application of the symptomatic prescribing limited by the advances of modern medicine; finding his *materia medica* unmasterable during a natural life time; finding failure after failure with drugs apparently indicated he naturally drifts into what our purists would call a "slipshod" way of prescribing drugs. When he comes in contact with an ordinary every-day case in which the prognosis is favorable, he does not stretch his memory centres for a differential diagnosis between fifteen or twenty remedies suggested by the case, but he immediately gives a drug that either in his own or other hands has most frequently proved effective in that particular affection. In other words, he does not take off his coat, roll up his sleeves, and expectorate on his hands to do a job of therapeutic work that requires only a skilful turn of the wrist to accomplish, and feels satisfied with results, inasmuch as those results were almost sure to occur anyway, and it wouldn't make much difference to the patient anyway, for he would get well whether the medicine worked or not. This tendency to routinism is inherent in medical men, and before it can be eradicated, it must be indisputably demonstrated that there is a better and quicker way to prescribe drugs.

The doctor is thus brought face to face with the fact that the application of the so-called symptomatic method of prescribing for the sick is exceedingly difficult of accomplishment, and he immediately wonders if there is not a cog loose in the wheel somewhere. He cannot blame the law, so he blames the method; and he has a perfect right to blame it, for as a practi-

cal physician he has ascertained that the method is not *reasonably* successful; that it is cumbersome of application; that the basis from which he makes the application is uncertain, so uncertain as to be insecure; that he never makes an ideal prescription, that is, never gets a true totality of symptoms; that when he approximates an ideal prescription it fails him more often than it succeeds. Still unable to doubt the truth of the law of similia, he finds refuge in assaulting its methods, and comes to the conclusion that symptomatic prescribing represents only one phase of a universal law. Symptoms present the subjective, the psychological side, but rarely the pathological or pathologiphysiologic side, if I may so put it. He sees that only a part of a drug picture is presented. He now no longer ignores diagnosis in his prescription. If he prescribes for a case of typhoid, he endeavors to cover not only the subjective symptoms, but the ulceration in Peyer's patches and the altered blood state. Who shall say he is not as good a Homœopath as before he attempted to combine symptoms and states with pathological alterations in function. In my opinion he is a better Homœopath than the man who cannot or will not see that symptomatic prescribing is only one phase of the application of the law of similia. Again, in my opinion he is the only real Homœopath, the only real follower of Hahnemann, for he is trying to develop the application of the law and employs the method of that application. This modern Homœopath has felt the impetus of progress, he is more than a pill peddler, he has realized the deficiencies in his law's applicability, and is endeavoring to construct a new materia medica, based on sound, sensible and tenable grounds. He is doing this work under difficulties, because the works are few in which he can find a *full* picture of the drug. He studies poisoning, for the *tissue* effects of drugs; he studies symptomatology for the intangible yet valuable subjective effects. He combines these methods. He finds new successes. His love of the law is enhanced. He is simply praying that his brethren will see the new light. He hopes ardently for the time when the Homœopathic profession will recognize the fact that the law of similia is supreme as a method of drug prescribing, but that the manner of applying that law has been defective. He quarrels not with the law, but alone with the manner of its execution. Is he to be condemned for this? Is he to be accused of being a traitor to the cause? No! He is

the true lover of the law. He seeks its enhancement. He realizes that as surely as the sun appears to rise and set, the Homœopathic school is doomed to annihilation, if it does not do its duty and develop to its fullest extent the law. Progress is progress. We must acknowledge after all these years of practical experience in attempting to practice the symptomatic medicine, that there is more in the law of similia than is expressed in the phrase, the "totality of the symptoms." When it is universally seen in medicine that the law of similia *is not a law of cure but a law of drug selection*, and that there are many ways of making that selection, of which the symptomatic method is only one, the work of the school of medicine known as the Homœopathic, will be justified, and not till then. Let us be up and doing. Let us prove that we can demonstrate this truth. If necessary, let us stand for the truth of the law of similia, even if we have to smash to flinders the methods of the master. If Hahnemann were here he would applaud the endeavors of his followers to extend the usefulness of the law of similia. At any rate, it is the *law*, not the man, to which we owe allegiance, if we believe in the truth of this law.

ECHINACEA AS AN INTERNAL ANTISEPTIC AFTER LABOR.—Dr. A. D. Hard gives this remedy to all cases after labor. He considers that the third day "milk-fever" is produced by mild infection. It does not occur in those cases which have received this remedy. As very few labors occur without some lesions, without some slight lacerations or abrasions of the vagina, cervix or uterine surfaces, he believes an internal remedy that will prevent septic postpartum conditions to be necessary in all cases. The claim is that if Echinacea is given, no fever, nor septic infection, nor mammary complications will occur. A rather extravagant sounding claim, but the writer testifies to the practical success of the plan of treatment.—(*Recorder.*)

EDITORIAL.

THE PROFESSION OF GETTING HURT.

THE series of papers by Mr. Theodore Waters now in course of publication in *Pearson's Magazine*, are of more than ordinary interest to physicians generally. While the members of our profession can scarcely be said to be in league with the villains whose conspiracies are thus exposed, nevertheless, it is necessary in order that their schemes may prove successful, that medical experts be utilized for evidence as to the extent of the alleged injuries. Mr. Waters's papers narrate in plain but impressive style the doings of several gangs of criminals operating in Chicago, New York and Philadelphia. Their scheme consisted in permitting themselves to fall from trolley or railroad cars and sustain slight injuries, for which they would attempt to exact large sums of money from the companies. Various injuries of a permanent character were simulated. Reputable physicians of skill were at times led into the belief that the sufferings were genuine. At the present writing, a number of the conspirators have been convicted and sentenced to prison for long terms. The inhumanity of the criminals is well shown by their utter disregard of the lives of children, who were intentionally placed in danger and injured, that their unnatural parents might reap monetary returns. Well may we ask: "What will man do for money?"

Systematized crime of this character quite naturally horrifies the community. And yet we have long been aware of the fact that such crimes were rampant. We recall an incident occurring in 1896, when bicycle riding was the prevailing fad. A small child ran from the pavement into the street and faced an approaching bicyclist. At the last moment her courage failed her, and she jumped aside crying, "My mother says if you run over me, you must give me one hundred dollars." We have long known that there existed a class of people who regarded an injury, however slight, sustained through the alleged negligence of a corporation, as a valuable asset.

After all, the principal evils attached to damage suits do not originate among the criminal classes, but among the honest dupes of pettifogging lawyers and sympathetic physicians. The usual case runs something like this. A neurotic woman while riding in a car sustains a sudden jar and is thrown to the floor. She is somewhat shaken up at the time, feels a little nervous, returns to her home, and within a short time the whole matter is forgotten. The news of the accident is noised about, and reaches a certain class of attorneys whose runners forthwith interview the patient. She and her family are solicited to bring suit against the road. After numerous interviews the patient is finally convinced that the company should make handsome compensation—sufficient indeed to keep her from want for the balance of her days. Litigation begins. The company offers moderate but adequate damages, but this settlement is refused. The attorney for the plaintiff avers that his client has many terrible complaints, all of which must continue for the balance of her days. An additional suit is brought on the part of the husband for the loss of his wife's services and companionship. After many months, the case comes to trial, and a verdict which is rarely satisfactory to either party to the controversy is rendered. In the course of the trial we are treated to the degrading spectacle of expert physicians swearing to things diametrically opposed to each other. The latter fact leads the juries to disregard all expert testimony and render a verdict according to their own views or prejudices.

For this sad state of affairs we believe that the attorneys and experts for both plaintiffs and defendants are to blame. With professional pride the attorney for the plaintiff assures his client that he can secure a large verdict. The gloomier the picture of her sufferings, the more enthusiastic he grows. As a natural result, we have the client made ill by suggestion. She does not mean to be dishonest; she does not intend to deceive; but nevertheless, she fosters with more or less pleasure each new symptom as an additional point scored in the legal tragedy which she is undergoing. Where is the family physician all this time? In the bad cases, he is in regular attendance, thinking but little of his patient's legal interests, and ministering to her suffering. In the vast majority of cases he has ceased his attendance, and is made aware of the lawsuit only when he is subpoenaed to appear as a witness in court. He finds that ex-

perts, usually friends of the attorney, have been brought into the case. These gentlemen are placed on the witness stand and testify not to their honest opinions, but to a lot of hypothetical facts in answer to the questions propounded by the learned members of the bar. Not long since, we had the pleasure of listening to an eminent professor of neurology testify in the case of a phlegmatic colored man, a stevedore by occupation, whose cause for action was his inability to work for any length of time since the occurrence of the accident. It was said that the attorneys for the plaintiff had been supplying him with money to keep him going until after the trial. At any rate the expert for the prosecution testified that the plaintiff must undergo a rest cure in a sanitarium; that he would be obliged to have a special nurse at \$25 per week; that the total charges would amount to about \$100 per week, for a period of at least three months. The jury's opinion of this sort of testimony was shown by the size of their verdict, which covered the loss of time during his illness as shown by his history, some balm for his sufferings, but nothing whatever on the basis of permanent injury or an expensive rest treatment in a sanitarium. The plaintiff himself, an ignorant man, was to be pitied, for he was full of imaginary miseries, which he had nursed fondly under the hypnotic guidance of attorney and expert.

One thing that has impressed us in listening to the testimony in these damage suits is the very little medical and surgical treatment followed by the plaintiff in many instances. Thus, the whole treatment has been such as was received in three or four visits by the medical attendant, and yet permanent injuries were alleged. It really seemed as if the plaintiff had accepted the idea of incurability, and was disinclined to interfere with the will of Providence.

While thus scoring the plaintiff, the defendant is open to the charge of objectionable tactics. We have seen the defendant's experts allege because there were no objective signs that therefore there could be no disability. We have seen them refuse to discover the presence of such an evident lesion as a dislocated crystalline lens until traumatic cataract had appeared. Seekers for plain justice have been browbeaten in court as if being hurt by a corporation was a crime. Undoubtedly the unfair tactics of one side has led to ones equally unfair by the other.

Now comes the point which concerns the medical profession. This sad state of affairs could not exist without the co-operation of one of our number. How can we put an end to it? In the first place it should be one's duty to undertake expert examination in medico-legal cases only when he knows himself competent to give an authoritative opinion, and that such opinion must be honestly formed regardless of the interests of the other side, the interests of truth alone being respected. Such examinations must be paid for irrespective of the conclusion reached; under no circumstances must the fee be contingent on the size of the verdict. Physicians in charge of patients whose illnesses may become the subject of litigation should do all in their power to bring about recovery as early as possible, avoiding in every way, the damaging effects of suggestion on the part of pettifogging attorneys.

From a strictly financial standpoint, the above advice is also good, for attorneys and patients who seek litigation as a short path to wealth are only too prone, the trial being over, to leave the physician in the lurch and ignore his demands for payment.

Viewing the finale of the verdict from the plaintiff's standpoint, it is almost invariably unsatisfactory. Thus he is obliged to give his lawyer from one-third to one-half of the amount recovered. Experts' fees generally use up a couple of hundred dollars more. In bad cases, it is usually found that the balance of the amount is barely sufficient to reimburse the patient for the expenses of his illness.

The physicians in the case nearly always lose an unwarrantable amount of time by reason of the law's delays, reporting in court day after day, until finally told that the case has been postponed until the next term. For these delays, clients almost invariably object to paying.

DOCTOR OSLER'S FAREWELL ADDRESS.

THE farewell address of Doctor William Osler, delivered before the Medical and Surgical Faculty of Maryland, entitled "Unity, Peace and Concord," is full of so much good advice and characterized by such broadminded charity that it deserves the thoughtful consideration of every physician who has the welfare of his profession at heart.

Dr. Osler speaks first of the unity of the medical profession. "Medicine," he says, "is the only world-wide profession, following everywhere the same methods, actuated by the same ambitions and pursuing the same ends. This homogeneity, its most characteristic feature, is not shared by the law, and not by the church, certainly not to the same degree. . . . In little more than a century a united profession, working in many lands, has done more for the race than has ever before been accomplished by any other body of men."

And yet how few people are wont to acknowledge the truth of this latter fact. How few realize that it would be impossible for people to live with safety and comfort in our large and thickly populated modern cities were it not for the knowledge of vaccination, of sanitation and of the prevention and control of epidemic diseases, knowledge which has been gained only by the ceaseless effort and intelligent co-operation of countless workers all over the globe. "Linked together by the strong bonds of community of interest, the profession of medicine forms a remarkable world-unit, in the progressive evolution of which there is a fuller hope for humanity than in any other direction."

Dr. Osler next speaks of three things which are advisable in order to encourage professional unity. First, a broader reciprocity between State licensing boards. To this every physician will give hearty assent. A more objectionable system than the one now in existence would be hard to devise. Why a physician should be deemed competent to treat a human being at one place and be prohibited from doing so at another place, perhaps not five miles distant, is a preposterous absurdity.

The second need referred to is a consolidation of medical schools. The expense of conducting laboratories and of furnishing practical teaching is so great that we have no doubt but that the consolidation of medical schools where several exist

in one city would be a great economic saving and a benefit to all concerned.

"And the third desideratum," says Dr. Osler, "is the recognition of our homœopathic brethren that the door is open. It is too late in this day of scientific medicine to prattle of such antique nonsense as is indicated in the 'pathies.' We have long got past the stage when any 'system' can satisfy a rational practitioner, long past the time when a difference of belief in the action of drugs—the most uncertain element in our art!—should be allowed to separate men with the same noble traditions, the same hopes, the same aims and ambitions. It is not as if our homœopathic brothers are asleep—far from it—they are awake—many of them at any rate—to the importance of the scientific study of disease, and all of them must realize the anomaly of their position. It is distressing to think that so many good men live isolated, in a measure, from the great body of the profession. The original grievous mistake was ours—to quarrel with our brothers over infinitesimals was a most unwise and stupid thing to do. That we quarrel with them now is solely on account of the old Shibboleth under which they practice. Homœopathy is as inconsistent with the new medicine as is the old-fashioned polypharmacy, to the death destruction of which it contributed so much. The rent in the robe of *Æsculapius*, wider in this country than elsewhere, could be repaired by mutual concessions—on the one hand by the abandonment of special designations, and, on the other, by an intelligent toleration of therapeutic vagaries which in all ages have beset the profession, but which have been mere flies on the wheels of progress."

This declaration, coming as it does from the most eminent medical authority in the allopathic school of practice, deserves our serious consideration. We believe Dr. Osler to be sincere in the statements which he has made. We believe that he both honors and respects homœopathic physicians for the work they are doing and for the reforms which they have accomplished, and that he would gladly welcome the day when the division between the two great schools of medicine would be obliterated. Unfortunately, however, for unity and for truth, these views of Dr. Osler are too liberal to be accepted by the rank and file of the allopathic school. Even physicians of superior training and wide knowledge, in order perhaps to gain the applause and approbation of "the crowd," still persist.

whenever the opportunity affords, in making statements regarding the homœopathic methods of practice that are utterly unfounded in facts and are intended to ridicule and to defame. The following recent example of this is to be found in Cohen's *System of Physiologic Therapeutics*, a work scarcely out of the press. Dr. John K. Mitchell, of Philadelphia, in speaking of Osteopathy says: "In short we have to deal with a new 'pathy,' that is to say, with an exclusive system, founded on one idea, an idea, to be sure, rather more rational than that now-abandoned theory on which another exclusive system was built—namely the origin of all chronic diseases is the itch." These remarks, as Dr. Edward Cranch has well said, show "at once the bitterness of party spirit, and the limitations of his information." Until the entire body of allopathic physicians has become more deeply endued with the fair-minded and scientific spirit of Dr. Osler we fear that any attempts at unity between the two schools will be fruitless.

We heartily agree that it is "long past the time when a difference in belief in the action of drugs should be allowed to separate men with the same noble traditions, the same hopes, the same aims and ambitions." Homœopathy ultimately must become a part of general medical knowledge. Until that time it is the duty of our school to preserve and develop the principles of homœopathy. When the dominant school is willing to give the essential principles for which we as a school have stood, a proper and dignified recognition, the highest aim and hope of our school will be attained.

Truth is not divided against itself, and as medical knowledge grows we believe that many of the difficulties and prejudices which now separate the two great schools of medical practice will be cleared away and in time "the rent in the robe of Æsculapius" be completely repaired.

THE MEDICAL STUDENT'S LIBRARY.

THE question as to what books to purchase is one of deep interest and concern to every student of medicine. The limited purse of many students renders it necessary that they should purchase only such books as are necessary to intelligently carry on their work. Others who are fortunate enough to be rid of this embarrassment, find it difficult to select from the large

number of books on the market those which will give the information in the form they desire without leading to confusion or waste of valuable time. Too many books are as harmful as too few.

The medical student has two objects in view. The first, and more immediate, is to pass his examinations. The second, and by far the more important, is to acquire such a knowledge of medical arts and sciences as shall enable him to skillfully treat the sick. In selecting his library the student must bear these two objects in mind. In preparing for examinations the notes taken during lectures are a most valuable aid, and usually serve as a basis for such preparation. During the first two years the work is largely of a preliminary character and condensed text-books or compends may be used to advantage. Every student, however, should have a complete and authoritative work on the two great fundamental branches of medicine—anatomy and physiology. Fortunately there are several of these to be purchased at reasonable prices.

During the last two years of a medical course, the work is more directly practical in its character and compends and quiz-books are to be largely avoided. They are likely to lead to a superficial, parrot-like acquaintance with a subject, rather than to a firmly rooted knowledge of the essential principles. And again, the student should by this time be acquiring and familiarizing himself with books that will be of service to him when he enters upon the practice of his profession. It is essential that he should have an authoritative treatise on each of the important branches of medical science: *materia medica* and therapeutics, pathology, diagnosis, practice of medicine and the principles and practice of surgery.

There is great danger in reading too widely. It is far wiser to master a few books than to skim over a large number. The benefit to be derived from a library is not to be measured by the number or cost of the books, but by the care with which they have been selected and by the industry with which they have been used. Above all the student should pay strict attention to the clinical instruction and to the practical work, for knowledge thus acquired is far easier to retain and to utilize than that gained from lectures or books.

GLEANINGS.

TREATMENT OF IDIOPATHIC EPILEPSY.—D. R. Brewer says that spontaneous cure of this disease is possible, and mentions one of the several cases in this observation. He calls attention to the necessity of more care as to the prevention of the trouble, especially in infants suffering from convulsions. The proper treatment and environment in these cases may prevent the later development of the disease. The treatment of the individual convulsions is also important, and the aura may afford a warning that enables the patient to abort the attack. He advises the carrying by epileptics of nitrite of amyl pearls for the purpose. Other methods may also be effected in special cases. In epilepsy there is an autointoxication, usually of gastrointestinal origin, and the diet should be carefully regulated. These patients are usually very hearty eaters, and it is advisable to restrict the diet in quantity, to regulate periods of eating and to insure thorough mastication and digestion. Intestinal elimination must also be attended to, and for intestinal antiseptics he finds salol combined with phytolacca often very useful. For combating the nervous irritability the bromides are most useful, and he prefers the sodium salt. Their overuse, however, is dangerous, and Brewer refers much of the existing epileptic insanity to this cause. The dose should be seldom more than sixty grains daily, in plenty of water after eating, and he sometimes adds fluid extract of *Solanum carolinense* in one-half to two drachm doses to the bromide mixture. Strychnine is also a valuable remedy for meeting the circulatory and vasomotor defect, and he specially recommends fluid extract of *Adonis vernalis*. Cerebral sclerosis calls for alteratives. In conclusion he insists on the importance of allowing plenty of time, at least five years after disappearance of symptoms before claiming a cure of epilepsy.—*The Journal of The American Medical Association*, May 21, 1905.

WILLIAM F. BAKER, A. M., M. D.

SYMPOSIUM ON TUBERCULOSIS OF THE URINARY APPARATUS.

Pathology of Kidney Tuberculosis.—This phase was discussed by Dr. William Welch. There were, he said, two forms of kidney tuberculosis, the scattered miliary and the chronic localized types. The former was usually associated with general miliary tuberculosis, but it was noticeable that the kidney, though sometimes crowded with tubercles, usually, contained fewer than other organs (particularly the liver and spleen), a fact found not only at the autopsy table, but in experiment work as well. Perhaps the kidney is particularly resistant to this infection. Certainly miliary tuberculosis here is of no clinical importance for it produces no recognizable symptoms. The disease is probably perivascular, though its embolic origin has been suggested.

Chronic Localized Renal Tuberculosis.—This was said to be a more interesting form clinically, much light having been shed on it by surgical advance. It may begin in the pyramids, sometimes at the papilla itself. An extensive caseous mass is formed, there is marked tendency to cavity formation and nephrophthisis results. Sometimes only one pyramid is affected; but often more than one, and then the picture is that of a pyelonephrosis. The pyramids are destroyed but the columns of Bertin persist. The process extends as do similar cavities in the lungs. A caseous mass is formed. This is surrounded by a layer of granulation tissue, and outside of this is a fibrous layer containing many tubercles. Another type of the condition is, however, (though less commonly) seen. Here several large caseous areas form and the whole organ becomes fibrous; but no real cavities appear. The disease may, though not commonly, begin at the cortex.

The Source of Renal Tuberculosis.—Dr. Welch said there was no doubt but that both ascending and hematogenous forms occur. Cohnheim was the first to show that not all renal tuberculosis was of the ascending type and to suggest the Ausscheidungs tuberkulose. If, as stated by some, injection was always hematogenous, it was difficult to see why the disease was more frequent in males than in females—as autopsy statistics undoubtedly showed. The speaker's opinion was that infection took place by both routes—in females most frequently through the circulating blood.

Clinical Features of Renal Tuberculosis.—Dr. Fitcher spoke of the varieties and symptoms of the disease, having drawn his facts largely from a complete monograph on the subject shortly to be published in the Johns Hopkins Hospital Reports by Dr. George Walker, who was unavoidably absent. Of 753 patients dead of tuberculosis in the Charity Hospital, in Berlin, 25 per cent. showed renal infection. In 19 cases the bladder was involved and the prostate and testis in 13. Of 1,369 cases autopsied at the Johns Hospital, 784 showed tuberculosis. In 25 the kidneys were involved. Of 36 military cases all showed renal involvement. Primary tuberculosis of the kidney was not demonstrated in any case. Liver and spleen were involved about as frequently as the kidney. In the medical treatment department of the hospital there had been 16,000 admissions. Of these 1,085 were tuberculous, the infection being renal in 17. Most of the cases occurred in the third decade. Tumore was palpated in 7 cases; pyuria was present in 13; hemorrhage in 8; acid urine in 15; and tubercle bacilli found in the urine of 9. The condition was secondary to tuberculosis of the lower genito-urinary tract in 9 cases.

Symptoms of Renal Tuberculosis.—The condition has often been latent and presents no additional symptoms when as part of acute military tuberculosis. Tilden Brown has reported cases without symptoms, but with bacilli in the urine. Polyuria has often been the earliest symptom. Its cause is not known. Frequent urination has usually been present early. With it there have been burning in urethra and bladder during or at the end of micturition. This is present without vesicle tuberculosis and may be due to the action of acid urine on a slightly inflamed trigene. Hematuria is always an early and may be the first symptom. The amount of blood is usually not large, but the hemorrhage continues throughout the twenty-four hours—differing in this respect from calculous hematuria.

Pyrhage appears sooner or later—the pus being abundant or only microscopical. Pain is common over the kidney. It is usually dull and radiates to groin, abdomen or scrotum. It may be paroxysmal, due probably to lodgement of a clot or a caseous mass in the ureter and at this time the urine may be quite clear. Tumor is palpable in many of the cases, is usually tender and may either preserve the kidney outlines or be quite irregular. Walsham and others have found bacilli where no kidney infection was found and this possibility must be borne in mind. The urine for microscopical examination should be collected by catheterization with careful technic as the tubercle and smegma bacilli are practically indistinguishable by ordinary stains. A portion of the second urine should be centrifuged and the smear stained by Grethe's method (carbel fuschsin, decolorization with 20 per cent. HNO followed by absolute alcohol, counterstain with alcoholic solution of methylene blue) or by the method of Bunge and Trautenroth (absolute alcohol, chronic acid, carbel fuschin, sulphuric acid, counterstain). Fever is a constant symptom. It is continuous but irregular, and may rise quite high if the ureter be blocked. Sweats are frequent. Cystoscopic examination with the ureter catheterization may be necessary to localize the disease. Injections of methylene blue and of phloridzin, together with cryoscopy, have been used to determine the condition of the unaffected side.

Operative Treatment of Renal Tuberculosis.—Dr. Kelly discussed the results of a series of 41 cases treated surgically by himself, Dr. Cullen and Dr. Hunner. In this series no case of ascending infection was noted, and it is probable that infection usually passes in the direction of secretion, going from kidney to bladder in the female and from epididymis to bladder in the male. Fescial tuberculosis without renal involvement occurred in only three cases of this series—being secondary to rectal involvement in one, and to hebal involvement in a second—the transmission being direct in these cases. In the third case no renal involvement could be proven though the patient always reacted violently to tuberculin. The route by which the bladder and then the opposite kidney are infected is not known. Probably it is the blood current, though disease of the urethral orifice may allow ascending infection from the bladder. Albert in 1890, pronounced nephrectomy for renal tuberculosis a flagrant error, but the disease is now undoubtedly curable. If allowed to go untreated there may be healing, or the enclosure of the kidney in a sclerotic sac or obliteration of the ureter. These processes will protect the general economy from involvement. Advance of the disease in the kidney transmission down the ureter, secondary infections and tuberculous involvement of other organs are, however, the dangerous and frequent results of neglect. Surgical treatment may be conservatively done and cure has occasionally followed curettage. If the disease is sharply defined a wide incision might be possible; but as a matter of experience it is usually too extensive for this procedure. Nephrotomy is never a curative operation, but is admirably suited for patients too ill to undergo nephrectomy. The examination of urine for tubercle bacilli is a difficult matter. Catheterization does not necessarily avoid the entrance of smegma bacilli and guinea-pig injection may be necessary. A persistent acid pyuria without other organisms is always suggestive. Animal inoculation may be positive in cases with no kidney lesions, but the absence of

urinary symptoms will make the diagnosis. The kidney should always be palpated, but the possibility of a hypertrophied sound kidney should always be kept in mind if a tumor is felt. Palpation of the ureter per vaginam is most important. Cystoscopic examination of bladder and urethral orifices will often make the diagnosis. Tuberculosis-reaction is valuable when pain is localized in the affected kidney. Nephrectomy should be done through the kidney triangle, and when the capsule is thickened and adherent Ollie's intrascapsular operation should be done. The next step in advance in this subject is earlier diagnosis. Localization of tuberculosis in the kidney is the most favorable one in the body; and vesical tuberculosis does not contra-indicate surgical treatment. Nitrous oxide is the anesthetic par excellence for these cases. Dr. Noble, of Philadelphia, said that this experience had convinced him that kidney tuberculosis was never the result of an ascending infection—first, because the disease was always more advanced in the kidney than in the bladder, and secondly, because the bladder always healed after nephrectomy. Dr. Osler referred to the importance of early diagnosis and said that hematuria and pyuria should always suggest the possibility of tuberculosis. He congratulated Dr. Kelly on his brilliant results and spoke of three cases in the series known to him personally who are now in excellent health several years subsequent to operation.—*Lansee Society of the Johns Hopkins Hospital.*

WILLIAM F. BAKER, A. M., M. D.

URINE EXAMINATION.—R. C. Cabot states that incited by a statement of Councilman that the chemical and microscopical examination of the urine failed to give certain information of the character of the renal lesions, as well as by discrepancies coming under his own observation, he has compared critically the records and post-mortem findings in the cases that have come to autopsy in the Massachusetts General Hospital since 1893. Although the number of cases is not large, he thinks they warrant the following conclusions: (1). Many cases of acute glomerular nephritis occur that are unrecognized by any known methods of examination. (2). The diagnosis is at fault in some cases of subacute and chronic glomerular nephritis, but in the great majority of cases the condition of the urine, taken in connection with other symptoms, foretold the autopsy findings. (3). In chronic interstitial nephritis the diagnostic resources appear to be neither so sufficient as in the chronic glomerular form, nor so inadequate as in the acute glomerular nephritis. In about a third of the cases, the diagnosis was correctly made before death. (4). Among other conditions mistaken for nephritis by too much reliance on the urinary findings, are senile and arteriosclerotic condition, mistaken for chronic nephritis, while in conditions involving passive congestion or acute kidney degenerations, the urine occasionally simulates that of acute nephritis. Even when no lesions are found at autopsy, the urine is sometimes highly albuminous and full of casts. (5). In ordinary urinary examination the common errors are: (a) The attempt to estimate urea without accurate knowledge of the patient's metabolism. (b) Stating that renal cells are present when all that is seen are small mononuclear cells, perhaps, from the kidney tubules, perhaps not. (6). Cryoscopy and other attempts to test the renal permeability more directly are not yet capable of supple-

menting in clinical work the older methods of examination. Cabot holds that the vast majority of estimations of urinary solids, including urea, are a waste of time, since they are not and cannot be made part of a general metabolism experiment and that the attempt to estimate the anatomic condition of the kidney by measuring albumin and by searching for casts is fallacious. The most reliable data are the twenty-four-hour quantity, the specific gravity and the color.—*New York Medical Journal*, March 25, 1895.

WILLIAM F. BAKER, A. M., M. D.

INFLUENCE OF FEEDING ON INFANT MORTALITY.—Howard. This question has been gone into in 8,348 children, 63.3% of whom were breast fed and 19.5% hand fed and 17.3% breast fed at first and afterward hand fed. The highest mortality rate was among the hand fed children. It was nearly three times that recorded for the breast fed and twice that for those who were partly fed by hand and partly naturally.

Among the hand fed children, diarrhoeal diseases and deaths from defective nutrition were quite common. Next perhaps in importance were chest diseases and lastly irritative symptoms as convulsions due to disorders of digestion.

Among breast fed children the most common causes were bronchitis, pneumonia, and convulsions. Perhaps the most striking feature of this class is the absence of gastro-enteric disturbances and the reflex symptoms resulting therefrom.

Among partly breast fed and partly hand fed the mortality is not so high as among hand fed, yet it is considerably higher than with breast fed babies. The following suggestive facts may be taken from this article:

(1) The use of sweetened condensed milk, either skimmed or unskimmed, should be discouraged.

(2) Whole unsweetened condensed milk should be permitted when one is satisfied that the milk is being used with the proper amount of dilution and necessary additions, say cow's milk.

(3) The death rate of children reared on proprietary foods is higher than those fed on diluted cow's milk.

(4) All food ought to be diluted with a suitable percentage of fresh milk (where there is a toleration of it by the stomach).

(5) The addition of patent foods to an infant's dietary is quite unnecessary.

(6) The risks to disease to which hand fed children are subjected is greatly minimized by mixed feeding.

(7) Any mother who is unable to freely satiate a child's appetite should be encouraged to use along with breast feeding a suitable substitute.

(8) Absolute necessity should be the only condition which should make one resort to artificial feeding alone.—*The Lancet*, July 22, 1905.

WILLIAM F. BAKER, A. M., M. D.

SERIOUS COMPLICATIONS IN TREATMENT OF ULCER OF THE STOMACH BY FASTING.—Dr. N. Reichmann, of Warsaw, though admitting the value therapeutically of the fasting cure, rest in bed and rectal feeding in ulcers of the stomach, calls attention to some of its unpleasant complications. In

neurasthenic patients one may observe serious collapsic states with palpitation of the heart, weak and rapid pulse and dyspnœa. These symptoms may appear either late or early during the treatment, but always before its conclusion and it will always force one to feed the patient.

Another complication is suppurative parotitis, a complication which Reichmann has observed in three patients; in one there was quite a quantity of pus and a resultant fistula which healed only after several months. In the second case the patient rapidly recovered after the pus was evacuated by an incision. In the third patient there was a double parotitis; for some reason it was incised late and the patient died of sepsis in a few weeks.

The cause is abnormal retention of pathogenic microbes in the buccal cavity from insufficient cleansing of the mouth by mastication. It can be avoided by scrubbing the mucous membrane of the mouth with a tampon dipped in a 4% solution of boric acid.—*Hospitalstidende* No. 21, 1905.

FRANK H. PRITCHARD, M. D.

PERFORATION OF LATENT ULCERS OF THE STOMACH.—In an article in the *Journal Des Praticiens* No. 22, 1905, the relative frequency of these perforating latent gastric ulcers is mentioned; they occur mostly during adult age, about twenty-seven years being the average. Alcoholism in men and chlorosis in women are the chief predisposing causes. The patient will have complained of transitory pain in the pit of the stomach, but his appetite will have remained good, his general health very satisfactory, when suddenly the signs of acute peritonitis set in. After a full meal, a shock, a sudden movement or even without seeming cause the violent symptoms of perforation appear on the scene. These often begin two or three hours after a meal, usually the noon meal. The pain which is extreme is the predominating symptom. "*C'est le coup de poignard peritoneal.*" The patient feels as if he had been stabbed in the belly with a dirk. Nothing equals its intensity nor its accompanying anguish. The patient suffers so much that he rolls about on the floor, screaming with pain. Or, he may remain motionless in his chair, fearing to move or to go to bed for fear of increasing his suffering. Hoping to ease his pain he may swallow a few mouthfuls of liquid which only aggravate his sufferings. The pain radiates over the whole abdomen and even into the thorax and shoulders. The belly walls are hard and retracted, board-like and very tender to pressure. Soon the abdomen becomes distended, the area of hepatic dullness disappears, there are signs of gas in the cavity of the belly. Vomiting is rare and not persistent for the gastric contents are poured out into the abdominal cavity. The respiration is costal, the pulse becomes small, thread-like and rapid. The blood presents a rapidly increasing leucocytosis. The temperature is below normal, the facies is peritoneal (hippocratic) the lips blue, the nose pinched, and the extremities cold. This period of "defensive reaction" is followed by one of general auto-intoxication. The vomiting disappears, the pain decreases, but in spite of the functional improvement the pulse still remains small and rapid, the extremities become colder and the patient dies with his mind clear but without the temperature even reaching normal.

Occasionally, though rarely, instead of a generalized, one may observe a localized peritonitis with adhesive or suppurative perigastritis which may

lead to an abscess which opens either in the back or the subumbilical region. These cases of localized peritonitis may give rise to a subdiaphragmatic gaseous abscess, forming the pyopneumothorax subphrenicus of von Leyden. This latter type is rare; rather is the generalized peritonitis the consequence of a perforating latent gastric ulcer. Its course is rapid for death usually takes place within four days. It cannot be confounded with other abdominal colics for its suddenness, its intensity, the localization of the pain in the epigastrium, the tension of the recti and the rapid and early disappearance of the hepatic dulness will direct attention to the lesion, especially if there be no vomiting, nor hiccough without any elevation of temperature. In appendicitis the pain is lower down and the area of liver dulness disappears late in the disease. Intestinal occlusion does not present retraction of the belly walls. Poisoning by various substances and lead-colic have less violent symptoms, but they may be confounded.

Immediate operative interference gives the only chance for a hope of recovery. It must be done at once, for even then the outlook is poor. The friends of the patient should be informed of the great seriousness of the case and of the small chance of success even with an operation, which they should be informed is the only source. Often one is called too late to hope for a favorable outcome.

FRANK H. PRITCHARD, M. D.

RENAL AND PERIRENAL ABSCESSES FOLLOWING FURUNCLES AND OTHER TRIVIAL PERIPHERAL PUS-FOCI.—Prof. Jordan, of Heidelberg, had observed and operated on twelve such cases. The abscess affected usually only one kidney and they were nearly all solitary abscesses. The general symptoms are inclined to be vague and to give rise to the most peculiar diagnostic mistakes; at the same time he calls attention to the slight and indefinite signs of the condition: enlargement of the kidney and sensitiveness to pressure below the twelfth rib. He lays stress on the importance of an early diagnosis and warns against waiting until the abscess tends to point or break externally. Such hematogenous abscesses he holds are more frequent than one generally thinks. It is well to examine the urine for signs. —*Muenchener Medicinische Wochenschrift*, No. 18, 1905.

FRANK H. PRITCHARD, M. D.

CONDITIONS WHICH RESEMBLE HEART LESIONS—PSEUDO-CARDIAC DISEASES.—Dr. O. Iosue calls attention to a class of patients who come to us thinking that they have heart disease when a careful clinical examination will reveal nothing tangible. These persons are "faux cardiac," or seemingly ill from a heart affection. Palpitation is their chief complaint, for they are morbidly conscious of the beats of the heart. Though possibly continuous the palpitation usually comes on in paroxysms, accompanied by alarming symptoms. The face becomes pale, the extremities cold, the skin covered with sweat, the pulse small, weak, frequent, and the patient is apparently suffering mortal agony. At other times the patient is excited, experiences an intolerable feeling of heat, his face is drawn, his hands bathed in perspiration, and the pulse rapid and soft. In all these cases the pulse heart is often absolutely normal though the rhythm may be disturbed

with extra-cardiac souffles independent of any heart lesion. These murmurs are audible only at certain times, change with respiration and position and are not heard outside of a certain area of auscultation. All of these patients are neurotic. Such symptom-complexes are met with in incipient tuberculosis, in young and anemic subjects who have led a wild and irregular life or in neurasthenics who are discouraged and anxious. One may meet with these attacks in patients with gonorrhœa or syphilis, stomach or liver diseases where with a neurotic base the fundamental disease itself has rendered the nervous system impressionable. Even in normal individuals where intense brain-work and emotions are at work as for example in preparation for examinations where tea, coffee and tobacco are liable to have been used in excess they may be observed. The whole symptom-complex is really of a neurasthenic nature. The patients do not sleep nights, their digestion is at fault, they suffer from headache, and their sufferings are partly real and partly imaginary. Treatment should be rather psychic than by medicines. At the most one may prescribe in the evening a teaspoonful of the valerianate of ammonia or from one to three pills of: musk, extr. valerian, aa. 0.10, extr. opium, 0.02. The bromides should not be given on account of their depressing action. The best results are obtained by psychotherapy. The physician should never allow himself to be pre-occupied in the presence of these patients. He should assure them that their sufferings are real, but that they do not come from any actual heart disease. That every one either from emotions or overwork is subject to such attacks. Accustom the patient to be calm, to exercise self-control and to do everything slowly and quietly and above all to eat slowly and deliberately. Cold baths act unfavorably while tepid baths act sedatively.—*La Nuova Rivista Clinico-Terapeutica*, No. 5, 1905.

FRANK H. PRITCHARD, M. D.

PITRES SIGN IN PLEURISY WITH EFFUSION.—Dr. Nogueras calls attention to the value of Pitres sign in pleurisy, with effusion. If one stretch a ribbon or a string from the sternal notch to the pubis, instead of it being directly in the middle line in right-sided effusions the right half of the thorax will be found to deviate to the right, and the contrary holds true in left-sided ones.—*La Medicina De Los Niños*, Junio, 1905.

FRANK H. PRITCHARD, M. D.

OCULAR PALSY WITH MARKED MONOCULAR AMBLYOPIA.—The report of a very interesting condition, occurring in a boy, 14 years of age, following injury of the right eye with a pitchfork. Outside of a minute wound of the conjunctiva near the inner canthus and a little extrayasation of blood around this spot there was no evidence of any penetration wound. Examination revealed palsy of the levator palpebrae, superior rectus, and sphincter pupillae, with marked monocular amblyopia which persisted for several days and terminated in recovery. No treatment beyond rest in bed and an aperient dose of mercury and chalk was ordered. In discussing this case, Collins says we are left to assume that the trauma occasioned some "molecular" changes in the optic nerve, the ciliary nerves or

muscle, and the levator and rectus superior muscles or their nerve supplies, which abolished temporarily their respective functions. W. J. Collins, M. D., London.—*The Ophthalmoscope*.

WILLIAM SPENCER, M. D.

AMBLYOPIA DUE TO METHYL ALCOHOL—In a recent contribution a review of the principal ocular phenomena of methyl alcohol intoxication is given and the report of an additional case. The patient complained of marked diminution in vision which had come on suddenly after a severe drinking bout. Forty-eight hours later, he found on awakening from a deep sleep that he was totally blind and remained so for thirty-six hours, after which vision began to return. This improvement became stationary after a period of six months. Vision remained R. E. 1-20; L. E. 1-10. The fields were contracted in the characteristic manner. There was total color blindness. J. W. Sterling, M. D., Montreal.—*Ophthalmic Review*.

WILLIAM SPENCER, M. D.

EYESTRAIN.—The etiology of eyestrain is taken up from a phylogenetic point of view and assumes that the abnormalities of human vision are due to the change from the aboriginal to a domesticated condition. In this he includes, however, the changes from a horizontal position of the spinal axis to the upright position, and the more anterior and parallel position of the eyes, etc., which are shared by the higher simians with mankind. In man, however, there is a still further extension of the process, and there is developed a power of sustained convergence for nearwork. The divergent tendency exists in all animals, as is evident during sleep and after death. The special headaches of sightseers is not due to strain on the elevator muscle, but to that on the internal rectus to overcome the greater divergence caused by looking upward. The tendency of civilized man is toward myopia, and the failure of sight in old age is a reversion toward the animal normal. A. G. Pohlman, M. D.—*Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

OPHTHALMIA NEONATROCUM.—The writer holds that rigid cleanliness, while it will greatly diminish the number of cases of blindness from this cause, will not always prevent it, and that the Crede method, while efficient, sometimes causes irritation. He sees some hope in the use of some of the less irritant silver salts than the nitrate, but believes that we need more experience in their use before we can give them the same confidence. Even in case of actual purulent disease, careful treatment will usually prevent blindness. He thinks that social conditions favoring or opposing the spread of gonorrhœa are more important than legislative measures aimed directly at purulent conjunctivitis, and that gonorrhœa is a malignant contagious disease and should be publicly recognized and dealt with as such in all its clinical manifestations. E. Jackson, M. D., Denver.—*Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

GENERAL THERAPEUTICS IN OCULAR DISEASES.—The author points out the danger of a narrow specialism and the necessity of paying attention to the

broad principles underlying all rational therapeutics, applying this especially to ophthalmology. He emphasizes the evil of assigning to local treatment more than its proper value and the necessity of a study of the general principles of pathology before real progress can be made in the treatment of diseases of the eye. He states that local conditions can often be explained by a study of the general systemic condition. Improper feeding with defective elimination, for example, is often the cause of phlyctenular conjunctivitis, and this illustration of the general principle is carried out at some length in the paper. The importance of assimilation and elimination as a basis for rational therapeutics is insisted on, and he emphasizes the importance of rest as an aid to nutrition. A. Maitland Ramsey, Glasgow, Scotland.—*Annals of Ophthalmal.*

WILLIAM SPENCER, M. D.

UNILATERAL PROPTOSIS AND EDEMA OF THE LIDS OCCURRING IN THE COURSE OF SCARLATINA.—The patient, a boy aged six years, after two days of malaise, developed a mild attack of scarlatina, with only slight affection of the throat. He made very good progress up until the ninth day, when the temperature which had been normal for two days, rose to 101.4° F. and he became heavy and drowsy. The eyelids of the right eye were swollen and red and the eye itself became prominent. There was no congestion of the conjunctiva. The temperature returned to normal in a few days, but the eye symptoms persisted although to some extent improved. On examination at this time, there was a bluish-red blush over the upper lid only; both lids were swollen and oedematous, more especially the upper one. The swelling was not tense or indurated, and the boy was able to keep the eye open. No enlarged veins were visible, but the lower lid was slightly bluish. The exophthalmos was very evident; cornea clear, pupil normal in size and reaction. There was no impairment of mobility beyond what might be expected as the result of the protrusion. Pain and tenderness were absent. When examined ophthalmoscopically a few days later, the fundus was normal. The local treatment consisted of warm fomentations of boric acid lotion with a mild astringent. For several weeks after recovery from the scarlatina, a slight degree of swelling of the lids occurred at variable intervals. It then disappeared, but the proptosis persisted for two months. The exophthalmos eventually disappeared. The author notes the rarity of ocular complications in scarlatina and gives references to the previously recorded cases. Louis Werner, M. D.—*Ophthalmoscope.*

WILLIAM SPENCER, M. D.

THE ORIGIN OF INTRAMUSCULAR DIVERTICULA OF THE TUBE LUMEN.—*Hoehne* has examined 136 fallopian tubes for the purpose of determining this question. This subject is closely associated with the determination of the origin of tubal gestation. Werth believes that in addition to the already described, but rather rare hindrances to the passage of the ovum, other and more frequently existing obstructions must be sought for. The author subjected 136 oviducts to careful microscopic examination, after injecting the lumen with a Berlin blue gelatin preparation. He describes one case in extenso, in which while the gonorrheal infection in one tube remained within the muscular membrane, in the other tube small abscesses developed

within the muscular wall, and these cavities became clothed with epithelium and remained permanently. In none of the cases examined were such diverticula found which were not the remains of previously occurring inflammatory processes.—*Arch. f. Gyn.* Vol. 74, 1.

THEODORE J. GRAMM, M. D.

INTERNAL TENSION AS ONE OF THE CAUSES OF ECLAMPSIA.—Mynlieff believes that sufficient importance is not ascribed to this factor by the adherents of the theory of toxæmia. Conceding that the theory of Halbertsma (pressure on the ureters) went too far and was too exclusive, it is by no means certain that pressure on one or both ureters or an increased resistance within them, may not constitute a direct cause of eclampsia. As is well known even moderate pressure upon the ureters exerts a great influence upon the circulation of the blood in the kidneys, and from the experiments of Hermann, Heidenhain and others we also know how the secretion and composition of the urine becomes changed. Lindemann also has shown that even moderate pressure diminishes the quantity of urine and the amount of urea, which must be the result of disturbed circulation, mainly retardation of the same in the veins. He repeatedly observed that increased pressure in the ureter and consequent diminished blood pressure retarded the circulation in the renal vein. At the same time the kidney increased in size, which could only be due to impaired venous ebb. The relation between these two occurrences, increased pressure in the ureters and consequent venous stasis, could only be explained by a transfer of the pressure in the ureter to the kidney substance, while the firm inelastic renal capsule hinders swelling of the organ. Thus the kidney substance is compressed on the one hand by the increased pressure in the ureter and the renal pelvis by retained urine and on the other hand by the firm capsule. The view of the author is fortified by several other observations quoted. He also describes the anatomical relations inducing pressure on the ureters, present when the uterus enlarges in pregnancy. He believes his opinion is sustained by some cases of eclampsia operated by Edebohls in the same manner as the latter operates in chronic Bright's disease, and quotes the latter author who says a woman suffering from uræmic convulsions is entitled to the positive benefits of recapsulation, whether pregnant, in labor or in the puerperium.—*Zentralbl. f. Gyn.* 1905,—392.

THEODORE J. GRAMM, M. D.

THE PELVIS IN WHITE AND IN NEGRO WOMEN.—Riggs has made a comparison of the pelvis in white women and in negro women in 1,500 cases occurring at the Johns Hopkins Hospital, and had also examined the relative size of the child at birth in each race. This matter is of interest in reference to the general belief that labor is more severe and complicated according to the higher development of the race. Observations were made in 779 white women and in 721 negroes. The pelvis was regarded as normal when approximately normal external measurements were found, and a diagonal conjugate of 11.5 cm. (4 3-5 in.). It was classified as generally contracted when the external measurements were diminished and the diagonal conjugate was less than 11.5 cm. The pelvis were classed as simple flat when the external measurements were more or less normal but

with a diagonal conjugate of 11 cm. (4.2-5 in.) or less. Under rachitic pelvises were placed those cases which showed the characteristic changes in the ilia and sacrum as well as in the femur, without regard to a definite length of the diagonal conjugate. The results obtained were as follows:

Pelvis.	White.	Negro.
Normal	707 = 90.75%	470 = 65.18%
Generally contracted	36 = 4.62%	167 = 23.16%
Simple flat	26 = 3.33%	14 = 1.94%
Rachitic	10 = 1.28%	70 = 9.70%

From this it appears that the occurrence of normal pelvis is much less frequent in the negro race; that the number of generally contracted pelvis is more frequent; that the flat pelvis is rarer in the negro race than in the white; that the rachitic pelvis is much more common among negroes.

It also appears from these studies that in white women the pelvis is low and broad as compared with the narrower and relatively deeper pelvis of the colored woman. Contracted pelvis is 3.74 times more frequent among negroes. The duration of labor is longer in primiparae than in multiparae; in contracted pelvis than in normal pelvis; in negroes than in white women. The children of multiparae are larger than those of primiparae. The children born of women with normal pelvis are larger than those where the maternal pelvis is contracted. The white child is larger than the colored, being 1.5 cm. longer, 200 cms. heavier, and some millimeters larger in the several cephalic measurements. The occupation and surroundings of the mother during pregnancy materially influence the size of the child. There is no definite law which determines the size of the child in relation to the size of the maternal pelvis. The higher the race the greater is the proportion of male to female children. There is a greater percentage of occipital positions among white women. The percentage of spontaneous births is greater among negroes. Pelvimetry is an absolute necessity in scientific obstetrics.—*Zentralbl. f. Gyn.* 1905,—486.

From J. H. Hospital Reports.

THEODORE J. GRAMM, M. D.

EFFECT OF RAW MEAT ON NITROGEN METABOLISM IN TUBERCULOSIS.—The experiments conducted by Galbreith tend to show that cooking materially affects both the absorption and retention of nitrogen in the physiologic as well as in the tuberculous subject. While the total quantity of nitrogen present in the feces on a diet of raw meat is increased, that increase is due entirely to the presence of collagen; the soluble and digestible nitrogen is actually diminished. Gelatin has been shown to be by itself incapable of sustaining nitrogen equilibrium. The chief points of interest are that raw meat causes an increased retention of nitrogen, even with a diminished intake, and it also causes an improvement in intestinal metabolism, manifesting itself in the form of a diminution of the nitrogen in the feces. Digestive leucocytosis is invariably larger on a diet of raw meat than on that of cooked meat. This may be correlated with the increased nitrogen retention, on the supposition that the digestive leucocytosis is the evidence of a functional activity on the part of the leucocyte, the object of the activity being the secretion of a body to link the absorbed nitrogen onto the tissue cells.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

THE CREDULITY OF MANY OF OUR WORKERS IN MATERIA MEDICA.—Dr. W. C. Goodno, in *Progress*, states that "*credulity*" is really one very serious weakness of many of our workers in Materia Medica. The author means simply that some of our provers and some of our collectors of pathogenetic effects, show a marked readiness to believe a thing true, upon insufficient evidence. And this applies to things that are improbable or marvelous, as well as to things which bear the stamp of truth upon their faces. Dr. Goodno does not say this because he thinks so, but because, an intimate acquaintance with the most eminent workers in the homœopathic materia medica, extending over a period of thirty years, has taught him that it is a fact. The writer believes that it has been largely this serious weakness, that has permitted our materia medica to be loaded down with a mass of error that will require a generation or two for its expurgation. Dr. Goodno has offered this criticism, not in a spirit of antagonism, but from the point of view of one who is deeply concerned for the welfare of our school. The writer also takes the stand in regard to the teaching of our colleges; that as we have built up a large school of medicine, with colleges and hospitals, and are attempting to teach medicine in all its departments, and not merely therapeutics; it has become our duty to bear our share of the burden of upbuilding the various fundamental branches of medicine; and that we must not starve them through excessive attention to our special therapeutics alone. He also contends that the homœopathic school of medicine has yet to prove the superior efficacy of its peculiar method of therapeutics in the treatment of collections of cases of recognized forms of disease. So far, we have mainly devoted our energies towards demonstrating the favorable influence of homœopathic remedies over groups of symptoms and individual cases. He admits, in the past, some lack of opportunities; but claims that now our school possesses a sufficient number of hospitals, laboratories and trained experts, to enable us to return creditable answers to the demands of modern science. Of course, a paper of this sort is bound to make a stir. And so it should; for, while credulity is a weakness in any man; in a scientific observer, it becomes a crime, that cannot be condoned.

HOMOEOPATHY FROM THE STANDPOINT OF THE UNINFORMED.—Dr. A. Jacobi in an address upon "The Modern Doctor," offered to the young men

of one of our western colleges, a lot of information regarding Hahnemann and Homeopathy, that was as far from the truth as much of the stuff that is passing current in this year of 1905 in the medical and lay world, outside of those who have really studied the principles of homœopathy and the teachings of Hahnemann and therefore know whereof they speak. Dr. Jacobi thinks that: "Hahnemann began his career with a paper published in 1796." "Within a few years he completed his teachings, the principles of which were as follows:" Then the speaker tells all that he knows about the principles of Hahnemann in twelve short sentences, which utterly fail to convey a true conception of the principles of Homœopathy. Hahnemann did not begin his career in 1796 as stated. He graduated in 1779, and from that time until 1796, he published twenty-four original papers on medical and chemical subjects, an elaborate work upon Venereal Diseases, and many essays upon Hygiene. His teaching was not complete until more than thirty-seven years later, because his great work—The Chronic Diseases—did not appear until 1833. Dr. Jacobi is certainly not a chronological expert. But many of the critics of Homœopathy have been strangers to the truth. Thus Tagel speaks of the "ferocity" with which Hahnemann announced his new system. This critic also speaks of the "contempt" which Hahnemann felt for "actual observations and for experience." The truth being that Hahnemann was moderate and persuasive in speech and was the champion of pure observation and abhorrent of the vagaries and absurdities of theoretical medicine. Dr. Osler, who is somewhat of a humorist, in one of his farewell addresses, said: "It is time for the homœopathic brethren to be admitted to the fold, and squabbles over drugs should no longer separate men with the same hopes." It is a question whether we homœopaths and the members of the American Medical Association, have "the same hopes." The editor of *Pacific Coast Journal of Homœopathy*, from whose interesting "Chat" the above facts were excerpted, expresses the opinion that when Hahnemann himself shall be read and studied not simply as a dead system like the Brunonian doctrine, but as a simple art of healing, unvarying in its principles and its methods of applying them, Dr. Jacobi and our other critics will not have to invent so many theories explaining the continued existence and prosperity of our school. Homœopathy is not "a squabble about drugs," neither is it "the outcome of one man's imagining." The thousands of homœopathic physicians who practice it, know what it is. The millions of patients who have reaped its benefits know also what it is. The uninformed are respectfully requested to read the account of The Hahnemann Ter-Jubilee Festival, held at Hotel Cecil, London, April 10th, 1905; and published in July number of *The Journal of the British Homœopathic Society*. The distinguished President of the British Homœopathic Society, Dr. James Johnstone, B. A., F. R. C. S. Eng., gave "A Biographical Sketch of Hahnemann." Dr. McLachlan, of Oxford, delivered the oration, "Hahnemann as a Scientist." Dr. George Burford was eloquent in his address, "Hahnemann as Philosopher and Man of Letters." These contain much information regarding the accomplishments of the great physician Hahnemann.

ARSENICAL POISONING.—Dr. C. M. Boger, at the meeting of the I. H. A., offered the following very remarkable case of slight poisoning by a large

amount of arsenic. The woman swallowed an unknown quantity, the writer says less than *thirty grains*; she did not discover her mistake for an hour and a half thereafter. Her stomach was full. She then took mustard water and egg albumen which quickly caused emesis. The patient was seen by Dr. Boger three and one-half hours after the occurrence. During the three succeeding days the following symptoms developed:

Cutting over eyes, in temples, above ears and in cheek bones; passing gradually into a dull, tired feeling, most in the frontal bones; then followed symptoms as if a cold in the head had been taken, with squeezing pain in the malar bones.

Her face was red and bloated. Normally, the face was pale. Smell of cooking nauseated her, and she vomited regularly every hour; each attack was preceded by restlessness and accompanied by a sense as of heat all over. She was not thirsty, and when ordered to drink hot water, thought cold would do as well. However, when attempting to swallow cold water, it was regurgitated before reaching the stomach and did not seem to go down easily. Hot water could be swallowed with less difficulty, yet very little could be taken as there did not seem to be room for it.

The stomach was full of gas, which was forcibly eructated in quantities. Sharp aching across the region of the kidneys, better by heat, with very scanty urine. Tongue looked rough with a red spot near the tip and a slight white coating. No examination of the urine was made and these symptoms were antidoted by a prescription of *Colchicum* 200. This case was published in *Chironian* for August, and shows how large a quantity of arsenic may remain for one hour and a half in the stomach without producing death. There are several other features that are unusual. One of the most prominent symptoms of arsenic is the violent vomiting produced. Usually, the vomiting is severe and prolonged and occurs soon after the poison has been swallowed. Again, although the stomach was neither washed out, nor any chemical antidote administered; there were no serious after symptoms. Even after copious emesis, in arsenical poisoning, there is the danger that some solid *particles* may have remained adherent to the mucous membrane of the stomach, and the danger that some particles may have passed into the intestinal canal. These may subsequently cause inflammation and ulceration unless antidoted chemically and thoroughly washed out of the body. Emetics are not dependable in arsenical poisoning. It is better to administer the chemical antidote freely and repeatedly and to wash out the stomach repeatedly. And the intestinal canal must be emptied as well, should symptoms of irritation manifest themselves there. Omission of such antidotal treatment in a case might lay the physician open to censure or prosecution for neglect.

TWENTY YEARS EXPERIENCE WITH COLOCYNTHIS.—This is the title of a very bright and readable paper by Clarence Howard, M. D., in *Chironian*. The writer gives a number of graphic pictures illustrating the clinical applications of our pathogenesis of Colocynth. The results following a too hasty temper, the evils of violent anger, are found to be its most useful sphere of action. Anger and indignation from wounded self-love and pride, whether justifiable or not, are followed by sharp, neuralgic pains, either in various spots or following the course of nerves. Sharp,

tearing, rending pains so severe as to cause loss of consciousness. At first pressure ameliorates, but later when such pains have become chronic, pressure may aggravate. This is a good point. Such neurægic attacks in any portion of the body following the wounding of pride, anger, a display of ungovernable temper; are quickly relieved by colocynthis. Among the cases referred to by this writer was one of sciatica. The patient was an old lady, the widow of a physician. The case must have been chronic, for she had been treated by many physicians and the affected limb had dwindled to one-half of the size of the well member. She was a woman with a violent temper which exploded at frequent intervals, much to the detriment of her sciatica. During the attacks this patient threw herself screaming from her bed; and would raise "Hades" generally. Upon these indications Colocynthis was given. A cure followed within six or eight months. The author remarks that in iritis either of the rheumatic or of the syphilitic varieties, when the pains are burning and sticking or cutting, with sensation as if the eyeball had been squeezed or pressed upon; Colocynthis is curative. There is sometimes a discharge of acrid fluid in these eye cases.

THE EARLY REMOVAL OF MAMMARY CANCER.—Why do women hide the beginnings of mammary carcinoma so often, and thereby destroy all their chances of a cure by early and prompt excision? This thought has been repeatedly forced upon us when examining large growths, complicated by glandular involvement, which have been carefully hidden by the patient for years; or, until the occurrence of severe pain has forced the disclosure. And when the axillary glands have been indurated and the growth has begun to ulcerate upon the skin surface, there is really very little in the way of encouragement that we can offer to our patient. Surgeons very generally still advise the prompt removal of the growth, even under such circumstances. But, statistics do not warrant a hopeful prognosis after such late operations. We have studied the results in the few cases with which we have come into contact during the last twenty years; and the large majority have died within a few months after *late* operation, while those not operated have lived for a considerable time. Some of the latter have lived to a comparatively old age. On the other hand we believe it is possible to remove the majority of mammary carcinomas, if the removal is accomplished *early enough*, without subsequent recurrence. At least our small experience justifies such a conclusion.

DR. GRUBENMANN'S EXPERIENCES WITH DIPHTHERIA.—Dr. Grubenmann, in *Allg. Hom. Zeit.*, says that he has treated hundreds of cases of diphtheria during various epidemics and that he considers his mortality to have been less than four per cent. For the past fifteen years he has used no remedies other than Mercurius cyanatus, Mercurius bijodatus, Lachesis, Apis, Acid muriaticum, Lycopodium and Arsenicum iodatum. In the croupal symptoms attending diphtheria he does not use these diphtheria remedies, but prefers to administer Acon., Hepar, Spongia, Kali bich., and Phos. These remedies have seldom failed to relieve. There are several points mentioned by the writer of this article which are very interesting, whether or not they have the importance which the author attaches to them. He considers that in the treatment of diphtheria, it is absolutely essential to suc-

cess that the 30th potencies be used. He would not dare to use lower preparations in diphtheria, although in other affections he does not so limit his practice. He also makes use of a curious local application of *Arsenicum iodatum* 4x dilution. Ten drops of this are put into one or two table-spoons of 95 per cent. alcohol. Cotton, moistened with this solution, is applied over the neck of the child and renewed every two or three hours. He could always see, after 24 hours, a diminution of the swelling of the glands. (Trans. in *Recorder*.)

CURABILITY OF CATARACT BY INTERNAL MEDICATION. ADDITIONAL FACTS.—Dr. H. Goullon, of Weimar, continues to report success in cataract cases. He even considers that a cataract so complete as to be recognized by a layman, may be cured. His cases have, however, mostly been "incipient cases," and these he concludes would have necessarily progressed to complete opacity, had no internal medicine been given. Therefore all such cases are termed cures. The case mentioned in *Recorder* in which *Sepia 3rd.*, trituration was curative, was very striking. The distressing symptoms were: Black figures as large as the palm of the hand fluttered before the eyes. Spider-web like figures appeared before the vision. Intense pain in the sockets. Pressive pains worse in the open air. These symptoms were ameliorated by the *Sepia*. But, the ophthalmoscopic examination did not prove that a cataract had been cured.

LYCOPodium EXTERNALLY.—From India comes a rather startling statement from the pen of Dr. A. C. Murkerjee. In an irreducible hernia that had resisted manipulation, cold compresses and so on for three days, the application of tincture of *Lycopodium*, mixed with water, seemed to have the effect of relaxing the parts so that the hernia could be reduced. Since this occurrence, the writer says that he and his friends have succeeded in other cases of apparently irreducible hernia, by first applying the mixture upon compresses, and then repeating the manipulative procedures. In congenital hernia it has been useful, while in enteritis a mixture of tincture of *Lycopodium* and glycerine is rubbed upon the abdomen with excellent results. The mixture is made of the strength of five drops to the ounce of water. The writer claims that this external application is better than the ice-bag. We must give such statements a hearing, when they are made by intelligent, experienced physicians; but, at the end of this article is a paragraph that sounds uncanny and produces cutis anserinus as we read it. "*Lycopodium*, applied externally is better than operation, as it cures the disorder radically." This spoils the flavor of all that precedes. The article may be found in *Recorder* for August 15th, 1905.

A HIGH POTENCY CURE.—Dr. G. L. Barber reports the interesting case of an old lady, aged 87 years, who had been confined to bed for two weeks with the following train of symptoms: Sinking spells, about 2 A. M., feels as if dying, empty, weak feeling in pit of stomach and in region of transverse colon. Dizziness and headache and anxiety about recovery. Coldness of the limbs. Pulse scarcely perceptible. Now, even without physical signs, the reader can recognize the gravity of such symptoms in an aged subject. The physician prescribed *Digitalis cm. f. 2*, No. 5, pellets dry on

tongue. This one dose of two pellets seemed to be what was needed. The prescription of *Digitalis* is excellent in such cases and we have repeatedly witnessed the same results. But the question as to whether it is necessary to give the remedy in that manner is still an open one.

THOSE DELUSIVE SUBJECTIVE SYMPTOMS.—We had an experience recently that may prove of interest to some one. A pale, thin, anaemic looking man, aged sixty, was suddenly seized with excruciatingly severe pain referred to the region of the appendix, with great sensitiveness to touch and he soon developed a high fever. He had a reducible inguinal hernia on the right side. This pain seemed to spread upwards and to the right along the line of the ureter. His first physician diagnosed renal colic and administered morphia, hypodermically for two or three days, and without cessation of the sensitiveness, although the severity of the pain had passed. His next medical adviser informed him that he was suffering from appendicitis. It so happened that we were called in as his third attendant, after the man had been ill for ten days. He seemed sensitive over the appendix, but there were no other physical signs of appendical inflammation. The hernia was all right. His temperature was steady, at about 102. The only complaints, you see, were the abdominal pains and the sensitiveness to jar or touch. I made a couple of very thorough physical examinations of the man with the following findings only:—

Continuous fever—rapid pulse—rapid respiration. (One would not have noticed the rapid respiration unless it had been counted, as there was no dyspnoea and the breathing was quiet.) A dry cough occasionally—slight white, frothy sputum. Heart normal—no splenic enlargement—no typhoid eruption,—no kidney lesion.

In spite of the fact that no subjective complaints were present referring to the chest, we decided to watch that portion of the body until we could find some lesion or could positively exclude the lungs.

The first few days, nothing was noted save that the right lung did not expand as freely as the left, especially in the lower part. The respiratory sounds were seemingly soft and normal on each side. On the 14th day from the beginning of his illness, we detected the small area of pulmonary consolidation that had worked from inside outwards to the surface of the lung over the lower and posterior portion of the right side. The next day crisis occurred and convalescence began. Of course this is not very extraordinary as a case; but how easily might one attribute recovery to some remedial expedient instead of the normal crisis, if one had not found the small area of pneumonic consolidation that was so late in appearing, and which disappeared so soon? It might have been reported as a case of appendicitis cured by a remedy, for all the subjective complaints pointed to that locality. Really the remedies had little or nothing to do with the recovery. The subjective complaints—taken alone—are delusive. The physical signs, too, often elude one. Let us be wide-awake.

SOME OF OUR NEWER REMEDIES.—It is most gratifying to read the tribute of our distinguished author, Dr. A. C. Cowperthwaite, to the memory of the late Dr. E. M. Hale, and to the valuable records which that lamented writer left. When Dr. Hale finally compiled and published his New

Remedies, the profession let loose and roundly berated him for burdening us with a lot of chaff, from which it would ever be impossible to separate the few grains of wheat that might be hidden therein. Dr. Hale is dead, but the great value of his work and labor grows from year to year, and it has proven a priceless heritage to his followers. Few realize that it is almost entirely to this man's work among the new remedies, that we owe our present knowledge of *Gelsemium*, *Baptisia*, *Veratrum viride* and *Actea racemosa*. Imagine us without Gelsemium, for example, and his critics said that his symptoms were trash. Dr. Cowperthwaite in *Medical Century*, writes regarding some few of our latest additions to the *Materia Medica*. *Adonis vernalis*.—This drug reminds us of *Digitalis*, but its action is milder and not cumulative. When compensation has commenced to fail and there is a lowered vitality, with a weak heart action, slow, feeble pulse, scanty urine and dyspnoea, it is a valuable prescription; acting often after *Digitalis* fails; or may be used in place of *Digitalis*, when there are reasons for avoiding the latter drug. The writer says that he prescribes *Adonis* especially for feeble action and weak, irregular pulse associated with functional disturbance only.

Crataegus.—It is probable that a weak, irregular cardiac action will remain the chief indication for this remedy. But, it seems to have a more lasting, more permanent and curative effect than either *Digitalis* or *Adonis*; although it is slower in its action than either of these drugs.

Avena sativa.—This is a well established powerful nerve stimulant. The dose is generally stated as from two to ten drops of a good tincture. In alcoholism, when the patient is nervous and sleepless almost to the point of delirium tremens, it will bring tranquility. Nervous exhaustion, from sexual causes, brain-fag, worry or alcoholism indicate it.

Grindelia robusta.—This has become a routine remedy in *Rhus* poisoning, used both internally and externally. Through the pneumogastric nerve, it paralyses the muscles of respiration, and has been used therefore very successfully in asthma and bronchitis. Dr. Cowperthwaite has seen it relieve Cheyne-Stokes respiration in a very short time. This is valuable, as so few remedies have this power. The chief indication for it in respiratory trouble is the fact that the patient cannot breathe when recumbent. Breathing stops when lying down, and the patient wakes with a start, gasping for breath. In this paper, the author has also referred to *Sabal*, *Stellaria* and *Stigmata*, but his remarks regarding the latter are less suggestive.

TREATMENT OF CONSTIPATION BY MEDICINES.—Dr. H. E. Kinyon, in *Medical Forum*, after speaking of the difficulty of controlling the patient's habits, dietary and so on, says that he has concluded to divide his cases of constipation into classes; and, after inquiring about their occupations, habits and the diseases that might have an effect upon the regularity of the daily evacuations; he finds that one class seems to have a sluggish bowel movement, either from a nervous or muscular atony, which may be entirely local, the general health being excellent. In this class of cases he cures by either *Nux vomica*, *Strychnine* or *Arsenicum*.

Another class seem to have resulted from lessened secretion of intestinal juices, or a too rapid absorption of the liquids of the colon. In this class of cases, he has two remedies upon which he relies. One dose of

Plumbum 6x. every morning; and one dose of *Croton Tiglium* 2x., every night. The patient must also drink plenty of either hot or cold water, and must abstain from tea and from coffee and also from all alcoholic drinks.

In diseases of the liver, which decrease or prevent the flow of biliary secretions; *Chelidonium* or *Podophyllum* have served very well. Diseases of the kidneys or diabetes act on the bowels by draining the system of water: *Aconite* or *Arsenicum* seem to help. In the constipation of babies, *Natrum sul ph.* 3x. or 6x., a powder each night, will cure if there is not an actual derangement of the liver. If there is liver disease, he generally finds *Chelidonium* helpful.

The author concludes, however, that if he had to choose between medical treatment and the various auxiliary measures at our disposal, he would choose the latter. Open-air exercises, walking, regular attention to Nature's calls, a diet of foods that have a laxative effect or that leave quite a bulk of residue after digestion, the drinking of water, the avoidance of astringent foods and alcoholic beverages, which latter congest the intestinal tract as well as the stomach; such adjuvants with proper remedy will cure almost any case not dependent on tumors, cicatricial bands or some other form of obstruction.

NOTES ON BRYONIA.—Dr. Walter Sands Mills, in *North American Journal*, states that he rarely resorts to stimulants in either pneumonia or typhoid fever. Even if the pulse becomes a little weak and slightly irregular, Bryonia will usually carry the case along. In typhoid fever, unless some other remedy is clearly and unmistakably called for, the writer prefers to give the patient this remedy. Where this remedy is used throughout, the case is apt to progress mildly and without complications. We must remember, however, that the typical typhoid of Bryonia is not one in which the toxæmia is profound, nor the symptoms of the gravest types. Dr. Mills refers to one interesting case, which recovered under the Bryonia. It was a case that one could hardly consider likely to recover. A woman, aged 27 years, five months pregnant; was brought to hospital suffering with typhoid. The disease was in its second week. Five days after admission, she had a chill, and developed lobar pneumonia. Both diseases progressed in a normal manner under Bryonia. This woman was very ill. Delirium and respirations of sixty per minute. One day the pulse showed irregularity. The physicians were tempted to give alcohol, but decided to trust to the original prescription of Bryonia. Within a few hours, the pulse again became regular and recovery was steady. The foetus lived through all this, which was remarkable. Three days after the woman left the hospital a seven month foetus was delivered still-born. Dr. Mills uses Bryonia in the tincture and the three potencies above the tincture. In referring to the well known headache of the remedy, the writer remarks that it will relieve the dull, stupefying headache quickly, if administered frequently; and, sometimes the patient falls asleep. If he should do so, stop the remedy; otherwise, if on awakening the remedy is continued, the headache may return, and be worse than before.

DELIRIUM AND HALLUCINATIONS, AS TOXIC EFFECTS OF DIGITALIS.—Dr. W. F. Baker has made some original observations recently that may prove

of value and interest. It has seemed to this observer, that in several instances, although the Digitalis had been given in very moderate dosage, it had the effect of bringing on delirium attended by various delusions. Such toxic phenomena might easily have been mistaken for the symptoms of the disease. Several cases quite recently have developed ideas of mistaken identity which rapidly disappeared when the Digitalis was withheld. And, when, because of increasing cardiac weakness, the drug was resumed there was again a return of the delirium and hallucinations. The question naturally arises in the treatment of heart cases associated with delirium or visual hallucination: How much of these is due to the toxic action of our Digitalis or other powerful cardiac tonics and how much to the disordered nervous system *per se*? At any rate, the caution which Dr. Baker throws out regarding the use of physiological heart remedies, where there is delirium, is timely.

THE FUTURE OF SCHOOL INSPECTION.—Dr. James W. Ward delivered a very able address to the Teacher's Institute of San Francisco recently, during which he remarked that while the first important subject of school inspection is that which relates to contagious and infectious diseases, the future development of this inspection will be to go outside of this range and to accept for study and rightful advice, those who have physical defects of a grade debarring them from perfect physical growth. There is a promising field for cultivation in educating the slightly defective child. The between class which cannot keep march with the normal child in the regular school work. There is no place in our schools for mild types of backward children. This class must be taught in special supplemental schools, and the teaching must be concrete, practical, industrial and manual in character. His address has been reprinted in *Progress* for August; and, should be of great interest to physicians as well as to the teacher.

CUCURBITA CITRULLUS—WATERMELON AND ITS EFFECTS.—Dr. Douglass says that an infusion of the seeds of the watermelon acts promptly in relieving the painful urination of children, relieving the pain during passage of urine, and stimulating the flow of the urine as well. When male children cry at every urination and the diaper is stained yellow, we may expect prompt results. For painful urination, with a sense of constriction, and backache from passage of urates and phosphates (gravel) this remedy exerts a soothing influence upon bladder, kidneys and urinary passages.—(*Medical Counselor.*)

THE USE OF DRUGS IN ACUTE AND CHRONIC NEPHRITIS.—Many physicians prescribe diuretin, caffenin, digitalis, juniper, petroselinum, etc., in the early stages of nephritis, *i. e.*, at the period of oliguria (morbidly diminished urinary excretion) in order to stimulate diuresis. This treatment is very common. Dr. Carl von Noorden regards such prescribing as radically wrong. These stimulants are, so to speak, whip-lashings. It would be the greatest paradox to economize the work of the kidneys to the utmost possible extent in one direction, and in the other to excite them to increased activity by means of the strongest stimulants we possess. Such remedies should be used only in the later stages of nephritis, and especially in the chronic form of the disease. We must also bear very care-

fully in mind that observations on those patients who suffer from chronic atrophic nephritis, show that such drugs as digitalis, caffein, diuretin, camphor and squills; given to combat diminishing urinary excretion and lowered cardiac strength, are not without occasional bad effects. If we succeed in causing improvement of the heart's action and increased diuresis by these drugs no harmful side-effects appear. If we do *not* succeed, however, then their use and that of similar drugs is regularly followed by an aggravation of the general condition, far more marked than in the case of cardiac patients under similar circumstances. This evidently depends upon the difficult elimination of such substances and their retention in the body. This should teach us not to prolong drug treatment in order to secure free diuresis, and not to attempt to *force* a favorable result, should it fail to appear soon, by increasing our dosage. In cardiac patients one may sometimes succeed; but in nephritis this latter method of drug treatment is rarely successful and is very frequently followed by bad general results. This is a sample of the very useful sort of information that is contained in Von Noorden's little Monographs; books which every physician should own and study.

THE USE OF PLAIN WATER IN THE SUMMER FLUXES OF INFANTS.—Dr. Stephens brings up a very old but very useful therapeutic agent for the summer attacks of vomiting and diarrhoea, which are so common and so fatal in young children during the heated term. It is plain water, given in quantities as large as practicable. Stop the milk and milk foods and put the sick baby upon barley water. Give freely of plain, cool water. Throw away the hot flannels with which such children are generally burdened. Take off the hot, flannel belly-band, and keep the child cool.—(*Eclectic Journal*.) This homely advice cannot be repeated too frequently.

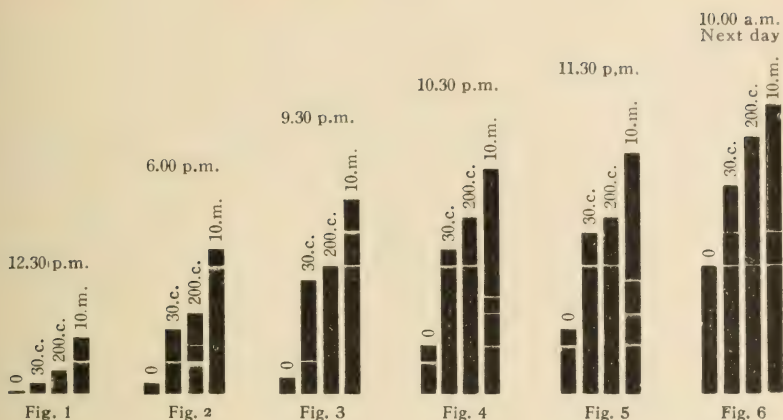
FOREIGN LITERATURE.

CONDUCTED BY P. W. SHEDD, M. D.

New York City.

HIGH POTENCY SCIENCE.—Dr. Nebel, (Davor, Switzerland), has carried out some interesting experiments in regard to the actual curative power of high potencies in a manner which will appeal to the grossest materialist. and which, furthermore, may be easily duplicated, proved or disproved by any individual of scientific acumen.

Following the experiments of Prof. Hugo Schulz, he took yeast fungi and subjected equal portions of the healthy fungi to the toxic action of a 1: 20,000 sublimate solution for, respectively, 10, 15, 30, 45 minutes. These groups of poisoned fungi were then treated with various potencies of mercuriur corrosivur and their degree of convalescence estimated by the amount of carbonic acid evolved in the Emborn saccharometer test. The results, graphically, were as follows:



in which 0=no treatment; 30c.=30th cent.; 200c.=200th cent.; 10m.=the 10M., from which it will be seen that the carbonic acid gas evolved (the measure of health in these fungi) from the portion treated with the 10M was at 10 A. M. of the next day more than double that of the untreated portion—all having been equally poisoned in the beginning—and considerably exceeded that of the yeast treated with the 30th and the 200th.

Further study of the diagram also shows the markedly more rapid action of the highest potency at the various abscissa of time.

This seems to be a truly scientific demonstration, with the chance elements of suggestive therapy, variability of environment, constitution, etc., well eliminated.—*Allgemeine Hom. Zeitung*.

SECALE CORUNTUM.—Secale acts directly upon smooth muscle fibres, and since during pregnancy the number and volume of these is increased, secale acts more upon the gravid than the normal uterus. The general circulation is involved and particularly the uterine vascular supply. To these capillary modifications is due the arterial tension, the slow pulse, the pallid face, and indirectly by cerebral anemia, the mental torpor, the headaches, visual changes, muscular atony and the diminution of reflexes.

The slowness of circulation explains also the formications, coldness of limbs, the characteristic gangrene, as well as the convulsions and coma; it is a remedy acting upon the muscles (vascular) of organic life. It produces a hemorrhagic diathesis. The least wound bleeds for weeks, with a marked tendency to putrefaction. Small furuncles appear, painful, debilitating, full of a green matter, which mature slowly and disappear slowly. Bulimia with a debilitating diarrhea, involuntary, abundant, watery, putrid, evacuated with great force. Suppression of urine. Burning over all the body as if particles of fire were falling upon it. Choleraic collapse, with pale face, distortion of the mouth. Sunken eyes constantly encircled by blue rings. Nasal hemorrhage. He cannot endure heat nor a close room.

Thirst continued and violent. Menses very abundant and of long duration; watery, dark, of disagreeable odor. Uterine hemorrhage. Limbs cold, and wrinkled, as if they had been a long time in hot water. Drowsy.

non-sensitive, coldness in the limbs, with sensation of debility in them and a sensation of something creeping beneath the skin.

Indicated in women of delicate appearance, weak, cachectic, of a nervous, irritable temperament. Of lax muscular fibre, no vascular strength, relaxed veins, passive abundant hemorrhages of a watery dark blood in which the red corpuscles are destroyed. Weak limbs, great prostration, especially when not produced by a previous loss of vital fluids (Cf. China). Leucorrhea, green, dark, fetid.

Enuresis of seniles, urine pale, watery and bloody. Dry gangrene, senile; heat insupportable. Sudden lochial suppression with metritis. Uterine pains of an expulsive nature. Locomotor ataxia with visual disturbances, paralysis of eye muscles, lightning-pains, ataxia, cannot walk. Chronic myelitis. Medullary sclerosis, with disturbed vision. Trigeminal anesthesia. Medullary anemia with loss of reflexes. Analgesia. Chorea. Mania. Suicida. Stupidity with pallid, altered countenance. Swoonings, with profound sleep, followed by weakness in head and limbs.

Painful uterine congestion; ovaritis especially right-sided; retroversion; metritis chronica hemorrhagica; carcinoma uteri. Dysmenorrhea with prostration, coldness of the extremities, and sensation as though the uterus sank and would extrude, with intestinal cramps.

Defective nutrition in children, with abundant watery evacuations, lenteria, nausea, prostration. Grave acute diarrheas, chronic diarrhea. Malignant dysentery. Constipation from uterine causes. Intestinal obstruction.

Potency. From the tincture to the 200th.—*Joya Homeopatica*.

METALLIC FERMENTS.—According to Robin, if a few tenths of a milligramme of a solution of metals such as gold, silver, platinum, palladium, etc., be injected subcutaneously, chemical effects are observed similar in all respects to those obtained from the diastatic ferments. These effects are

1. Increase in urea.
2. Raising of the coefficient of nitrogen-assimilation.
3. Increase of uric acid.
4. Increase in the excretion of urinary indoxyl.
5. A diminution in the total quantity of oxygen consumed, with a synchronous diminution of carbonic acid formed, whence arises an elevation of the respiratory quotient.

6. A temporary elevation of vascular tension.

7. Profound changes in the corpuscular blood elements.

Dr. Robin deduces from the above the possibility of assimilation of metals in infinitesimal amounts, as chemical diastases, whence the name he proposes to give them, of metallic ferments.

Thus is explained:

1. The energetic action of these metals as therapeutic agents in certain mineral waters.

2. The incontestable power of the minute dose.

3. The action upon the organism of insoluble metals in infinitesimal dosage, already so well known to the homœopath.—*Revue Hom. Française*.

THE HAHNEMANNIAN MONTHLY.

NOVEMBER, 1905.

THE TREATMENT OF POTT'S DISEASE.

BY W. N. HAMMOND, M. D., ASSISTANT SURGEON TO THE
HAHNEMANN HOSPITAL.

THE treatment of Pott's disease aims not only at the resolution of the disease, but also the correction of the associated deformity. No treatment is entirely successful that does not prevent, or where it has already formed, reduce the kyphosis. These happy results can only be attained by recognizing and treating the disease in the early stages, and combining mechanical, dietetic, hygienic and therapeutic means. While certain set rules are to be followed in a general way, yet each case is a separate problem for the physician, and demands careful attention in deciding the proper measures for immobilization, extension and correction.

In treatment, there should be borne in mind, the coincident inflammation of the membranes of the cord, and pressure by its products; the possibility of a tubercular myelitis; the rarity of actual bone pressure, and the probability of other foci in the body. R. Tunstall Taylor reports a case of double Pott's disease affecting the fifth, sixth and seventh dorsal and first, second, and third lumbar vertebræ; the lower inflammation beginning first precluded the possibility of its being due to gravitation. Such a condition could very readily be overlooked when accounting for the compensatory curves of the spine.

The cases may be divided into: acute, subacute, convalescing, and late, and, while the best results follow early treat-

ment, yet, even in late cases, some amelioration may be expected from proper measures.

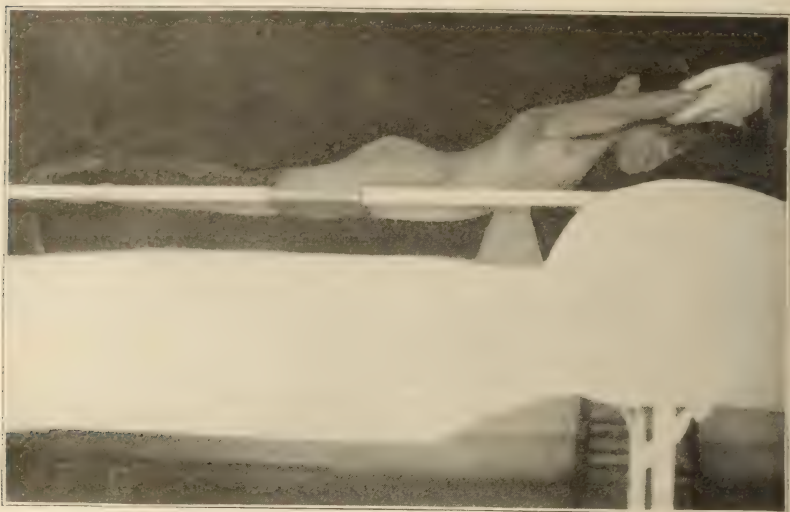


Fig 1.

HYPERTENSION OF THE SPINE PRODUCED BY ELEVATION OF SHOULDERS.

The acute stage is best treated by thorough rest with fixation, extension, and counterextension; obtained by placing the patient on a firm mattress underneath which is a board to pre-

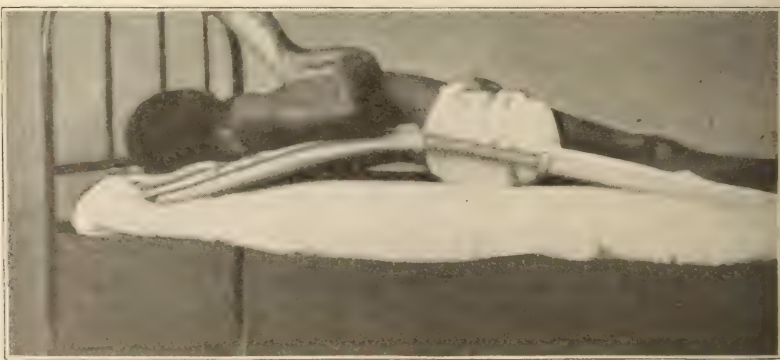


Fig 2.

METHOD OF HYPERTENDING THE SPINE BY BENDING THE FRAME, IN THE TREATMENT BY RECUMBENCY.

vent sagging, immobilizing by a frame or plaster of Paris suit: extending the spine by pads, evenly folded, placed on both

sides of deformity, with traction upon the head by pulley and weight, and counterextending by elevating the head of the bed or traction upon the waist or extremities.

The frame is of especial service in the treatment of children, its advantages are: better immobilization; cleanliness; portability, so that the patient can be carried into the fresh air a part of each day, and the practicability of making hyperextension by bending it at the desired place. The frame is made of gas pipe, rectangular in shape, and of various sizes; covered first with muslin and then canvas, which is laced at the back.

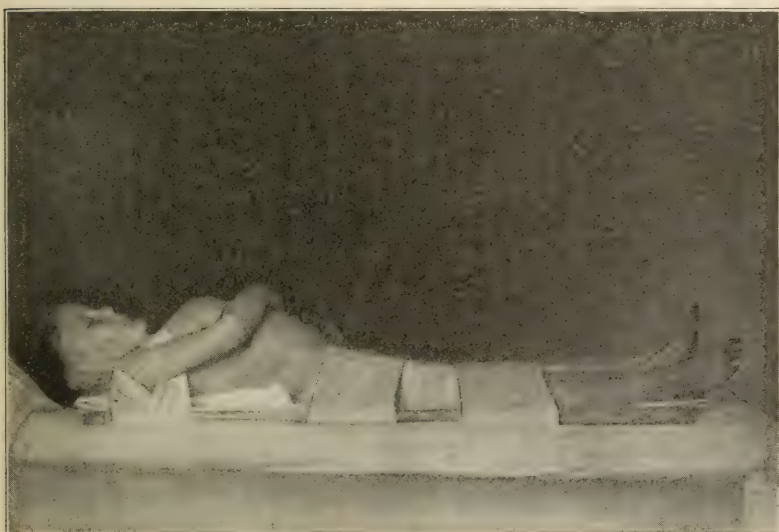


Fig 3.

TREATMENT BY RECUMBENCY ON A FRAME. NOTE PADS ON SIDES OF THE DEFORMITY.

It should be three or four inches longer than the child and slightly less in width than the diameter at the middorsal region. The patient lying upon the frame must be firmly fixed by a canvas apron overall, or by means of straps across the chest, pelvis and knees. The frame should be bent so that the spine is arched forward at the seat of the deformity, relieving by this means the intervertebral pressure and hyperextending the spine, very valuable adjuncts to the treatment by recumbency for hastening the progress of repair. Royal Whitman uses a frame narrower than the patient, and after fastening the

child securely by straps, applies over all a suit of clothes made to fit around the frame.

In cervical disease the traction upon the head should receive especial care as to the steadiness of the apparatus and the amount of extension. A very simple device is one recommended by Lovett: it consists of a band around the forehead and occiput with straps at right angles which connect with the pulley rope.

The time required to be spent on the frame is variable, but should be until the deformity is reduced and an apparent cure is effected, usually anywhere from eight to eighteen months.

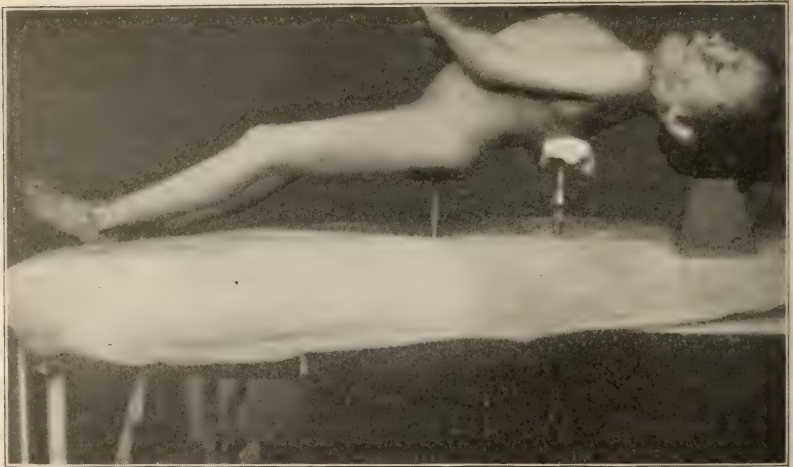


Fig 4.

METHOD OF PRODUCING HYPEREXTENSION WHILE APPLYING PLASTER JACKET,
AS RECOMMENDED BY GOLDTHWAIT.

When the acute symptoms have well subsided it is time to get the patient up and about, protected by a well-fitting brace or jacket. The many varieties of supports show the want of a satisfactory one for all cases, as well as the ingenuity of the orthopedists. The necessary requirements of a jacket are: it must be well fitting; immobilize and protect the spine, and in the early application make a certain amount of extension. It should be supplemented by some apparatus to immobilize and remove the superincumbent weight of the head in cases where the disease is above the ninth dorsal. This is best carried out by fixing the chin and occiput in shallow cups which are se-

cured in front and back to steel bars attached to the jacket in grooves with stop screws, so that the desired amount of extension can be procured. Another good head brace is made as follows: A steel bar runs up the back part of the jacket and is secured at the occiput to a trough, attached to this is a steel

band which passes from the occiput around the forehead. The old time jury-mast has been almost discarded; its disadvantages are: the difficulty of accurately adjusting the straps; the unsteadiness and awkward appearance of the apparatus. In dorsal caries there should be some appliance added to the jacket to make backward pressure upon the sternum to hold the brace closely to the back. The Taylor back brace with head piece for upper dorsal and cervical disease and breast plates for lower dorsal, meets the requirements in the majority of cases. In a report of thirty-nine cases treated with this apparatus by H. Ling Taylor all had absence of pain; the disease was arrested in thirty-three, and the deformity was decreased in one-half. A very efficient jacket can be fashioned in leather, fitted over a plaster of Paris mould of the back, the gibbus of the cast having been cut down so that the jacket makes slight pressure upon the deformity.



Fig 5.

A SIMPLE, EFFECTIVE BRACE FOR
USE AFTER THE DISEASE
HAS BEEN ARRESTED.

A rather unique back brace is one devised by Dane. It is quadrilateral in shape and consists of a pelvic band with up-rights and top bar, a horizontal bar on a level with the deformity holds in the desired position two padded plates; straps from the top bar which pass over the shoulder, with side straps and buckles, fasten the brace to a low leather apron. The

jacket should be adjusted accurately and worn persistently; nothing is so harmful as the intermittent use of a brace. It should be removed once daily, and, while the patient remains in the recumbent position, the back bathed, rubbed with alcohol and dusted with a good drying powder.

I have purposely left the plaster of Paris jacket for the last as the one most commonly used, especially in hospital work. It is of most value in subacute cases where the deformity is marked and there is a tendency to abscess formation. The things necessary for successful treatment with the plaster jacket are: careful preparation of the skin; ample padding; proper extension; snug fit; that it be worn persistently; changed at intervals, and that treatment be continued until all danger of a relapse is past. The skin should be prepared by washing with soap and water followed by a rub with alcohol and powdered with stearate of zinc or starch. Various materials are used for padding; a well-fitting shirt fashioned from stockinette should be first applied, then the crests of the ilia and both sides of the deformity must be thickly padded with saddler's felt, and the axillæ, and if a female, the breasts padded by layers of cheese cloth. The dental plaster is the best and the bandages should be freshly made and saturated one by one as needed. If the crinoline be washed before the plaster is incorporated the cast will dry while you are applying it. Extension while applying the jacket is better obtained by hyperextending the spine with the patient in the horizontal position rather than by the older method of vertical suspension, excepting cases of slight deformity where the head is to be included in the jacket. The more accurately you can hyperextend the local deformity the better the result upon the kyphus and compensatory curves as well as the process of repair.

The methods for hyperextending the spine while the patient is recumbent are: The hammock, especially applicable to cases of lower dorsal and lumbar disease; the method of Lovett of placing the patient face downward upon a frame and by means of a movable section elevating the shoulders, and the method of Goldthwait, placing the patient on the back, supporting the head, shoulders and pelvis and by pressure upon the kyphus hyperextending the spine.

The method of Calot of forcibly straightening the deformity at one sitting, while rarely practiced, has served a purpose by

showing the possibility of gradual reduction by milder methods, such as simple hyperextension of the deformity, or pressure and extension by the kyphotone.

It should be remembered while straightening the spine that there is often a lateral as well as backward curvature, the lateral preceding, as a rule, the backward.

The plaster jacket should be moulded firmly and evenly to the body, beginning just below the crests of the ilia and carrying it well up in front and back. When necessary to fix the head, the plaster must be moulded about the chin and occiput while an assistant makes manual traction. If one of the mechanical devices be desired it could be incorporated in the plaster. Where the disease affects the lower dorsal vertebræ the cast should be carried high anteriorly to make a certain amount of backward pressure upon the sternum. The jacket must be changed, as a rule, every six to eight weeks, the skin receiving especial care during the changing, and when reapplied the spine should be straightened a little more each time.

Treatment to be effective must be prolonged, as it has been clearly demonstrated that the deformity grows although the disease has been apparently cured. The time of cure is indefinite, anywhere from eight months to several years, after which it is best to support the back with a light jacket or brace. A simple and effective support is one in use at the Hahnemann Hospital dispensary; it consists of two upright bars connected by two cross bars, with the extremities bent outward. This part of the apparatus is sent by the instrument maker to the hospital before it is tempered. It is bent to the desired shape and returned for straps and apron to be applied. The whole cost is about three dollars. Its advantages are, accuracy and cheapness, the latter making it practicable for dispensary use.

A good semi-ambulatory mode of treatment, particularly of service in adult cases, which can be followed after the very acute symptoms have subsided, is recumbency on a board covered with a blanket, with the patient about for two hours in the morning and afternoon supported by a Taylor jacket.

The chief complication, the abscess, will often disappear under conservative treatment, although it is always better to anticipate a rupture by aspiration or small incision. The post pharyngeal abscess on account of the danger of rupture and strangulation should be incised with proper precaution. Ab-

scusses arising from the upper dorsal region are of serious import because of pressure symptoms and the danger of rupture into the posterior mediastinum. The chief localizing symptoms that indicate surgical intervention are: dyspnœa, paroxysmal in character, tubular and metallic breathing. These abscesses are usually in front of the bodies of the vertebræ, more to one side, and should be treated by an incision three inches long outside of the transverse processes, about one inch of the rib removed and the abscess opened, disinfected and drained.

The primary operations for Pott's disease are limited to: lower lumbar caries; cases where the vertebral arches or transverse processes are affected, and to rare conditions where actual pressure is made by bone upon the cord. These cases can sometimes be accurately diagnosed by means of the X-ray, and when operation is feasible it tends to shorten the course of the disease. The operation should be performed where thorough surgical cleanliness could be obtained. Where the bodies of the lower lumbar vertebræ are affected, the operation is performed through the anterior route; an incision is made in the right iliac region, the peritoneum is stripped back, the tubercular focus thoroughly curetted and the wound drained by a small wick of iodoform gauze. Disease of the arches or transverse processes is best treated by an incision along the sides of the spinous processes, as the tuberculous area curetted, dusted with iodoform powder and drained.

The cases where paraplegia persists from bone pressure are often relieved by laminectomy. In a certain number of cases psoas contraction persists after a cure has been effected and may require divisions of the contracted bands or subtrochanteric osteotomy but only after the more conservative methods have been tried, such as, gradual or forcible straightening with retentive brace or cast. Another late operation for the relief of those cases where marked deformity has occurred, from lateral as well as backward curvature, with pressure symptoms, is resection of one or more ribs, usually the tenth or eleventh.

The great importance of fresh air, hygiene and special diet recognized by the internist in the treatment of tuberculosis elsewhere holds good for these cases.

It has been the aim to have the necessary apparatus as simple and light as possible so as to be portable and in ambulatory cases to encourage the patient to be about.

The diet should be a mixed one with a large percentage of fats and in some cases supplemented by oil inunctions. It is a good plan to have the patient weighed at stated intervals to determine whether there is a general improvement. The therapeutic measures are met by tonics and the indicated remedy, in the selection of which our *materia medica* offers a fruitful source.

The prognosis varies with the treatment, though the disease tends to recovery. The deformity in children under three years of age if treated early can be prevented. In disease of the upper dorsal vertebræ the good results are interfered with to some degree by the efforts of respiration.

The relative reduction of the deformity from treatment at the different localities is: cervical best; lumbar next, and dorsal third.

The pachymeningitis associated with this disease inclines to recovery even after extreme degrees of interference.

It has been my aim to lay stress upon hyperextension of the spine by means of the frame or padding in the acute cases treated by recumbency; horizontal extension while applying the jacket in appropriate cases; the substitution of more stable apparatus to fix the head for the jury-mast, and the straightening of the spine by hyperextension and pressure at the local deformity, as showing the present trend of orthopedic surgery in the treatment of this disease.

REPORT OF THREE CASES OF CÆSARIAN SECTION.

BY THEODORE J. GRAMM, M. D., PHILADELPHIA.

(Read before the Homoeopathic Medical Society of the State of Pennsylvania, Sept. 21, 1905.)

It is probable that the Cæsarian section will ever awaken a lively interest. The operation is interesting intrinsically as an operation on account of its gravity and because there are usually two lives at stake; but particularly because of the startling suddenness that terminates a physiological process which in the minds of everyone has ever been associated with the idea of intense suffering during a protracted period of time. The conservative Cæsarian section may well be looked upon as the culminating achievement of modern aseptic obstetrics. No wonder that centuries ago an illustrious career was thought to be

ordained for those highly favored few whose quite unnatural birth distinguished them above their fellow men. This thought is still transmitted in the name with which we designate this operation. The Cæsarian section was moreover in all probability among the first major operations suggested though but vaguely to those who would aid the afflicted one in ancient and even in prehistoric times, only to be rejected with horror. To follow the history of this operation and to trace the progress of its development down to our own time is indeed a captivating pursuit. At the present time our interest centers mainly in the fact that with modern asepsis and the improved technique devised by Säger, this operation in some cases robs obstetrics of its horrors and in a few seconds brings joy because a child is born, while formerly many hours of anguish were spent in unavailing travail with death ever threatening and often closing the scene; and by universal concession the death of both mother and child during childbirth is one of the most distressing occurrences within the range of human experience. Furthermore, craniotomy upon the living child, that disgusting blot upon our escutcheon, that hideous reproach upon the fair name of our Art, can at last be cast aside as something unclean. It is true that to be able to do this has, through the centuries, been the heart's desire of our forefathers in medicine, even without being prompted by the enactments of pious men, but unfortunately prior to 1882 this was impossible. Symphyseotomy, also, devised by that distinguished Italian, so beautiful in theory and so destructive in its after effects, is in a fair way of being abandoned. As you doubtless know, its right to existence is now called in question, for they are debating whether this operation is based upon legitimate surgical principles.

It is my pleasure to offer as my contribution to this annual meeting of our Society, the report of three cases of Cæsarian section, operated during the present year.

The first case concerns B. J., an unmarried mulatto girl, 19 years of age. During her infancy this patient suffered from rachitis, on account of which she could not walk until four years old. Puberty came on during the twelfth year of her age. The patient is a dwarf, showing distinct evidences of rachitis, and measuring only fifty-two inches in height. She has a distinct left lateral curvature of the spine, the greater cur-

vature in the lower dorsal region where there is a pronounced thickening under the short ribs and involving them in a mass not further to be differentiated by palpation. The left iliac crest is one inch lower than the right, being thirty inches from the soles of the feet when standing erect, while the distance of the right crest is thirty-one inches.

The present is her second pregnancy. A year ago the first pregnancy was artificially terminated in a hospital at the sixth month of pregnancy and the patient says she was very sick afterwards. The menstrual period has lately been regular, the last one having occurred in the end of March, 1904. As this evidence of the stage of pregnancy did not accord with the physical signs elicited when first seen, further inquiry showed that she had not menstruated since being admitted to an institution on May 24, 1904. Quickening was said to have occurred on September 21, 1904. At this time the fundus uteri reached the level of the navel. From these unsatisfactory data it was not possible to determine the stage of pregnancy with accuracy, but the end of pregnancy was tentatively estimated to occur not later than the 24th of February of the present year, and the date for the Cæsarian section was set for February 16, 1905.

At the obstetric examination the pelvic measurements were found to be as follows: Interspinous diameter $8\frac{1}{4}$ inches; inter cristal $8\frac{1}{2}$ inches; external conjugate 6 inches; the diagonal conjugate taken in the usual manner was $3\frac{1}{2}$ inches; but since the symphysis pubis was unusually broad, the actual measurements of the available conjugate diameter were taken, and amounted accurately to $2\frac{1}{4}$ inches. This measurement was obtained with remarkable facility by having the index finger touch the sacral promontory, while the extensor side of the thumb easily could be made to come into contact with the inner side of the symphysis pubis. On palpation the fetal presentation was found to be cephalic, and probably in the left occipito posterior position, the fetal heart sound being most distinctly heard five inches to the left of the median line and on a level with the umbilicus. The placenta was situated on the right side.

As above stated, February 16th had been set for the operation; but on the morning of the 13th the patient, while assisting the nurse in the kitchen, casually mentioned that the amni-

otic fluid had been discharged, and shortly thereafter labor pains set in. The patient was therefore at once prepared in the usual manner for the section.

On making the incision the abdominal walls were found to be very thin indeed, hence there was no difficulty in gaining access to the abdominal cavity. The large pregnant uterus was instantly encountered, lying in dextro-lateral rotation. The observation was also made that since the amniotic fluid had been discharged, and since uterine contractions had been in progress for about four hours, that the head of the child was lying firmly upon the pelvic brim and was causing a pronounced protrusion of the abdominal walls just above the symphysis pubis.

The uterus was incised in the median line and at once there was a copious gush of blood, because the placenta was partly applied over the line of incision. The finger was therefore introduced into the uterine cavity between its walls and the placenta, and the latter separated so that the scissors could be introduced and the uterine incision increased to the required length. The portions of the fetus first encountered were the hands and its right side which lay directly in the line of incision, the child occupying, as previously diagnosed, the left occipito posterior position. Passing by the hands, I seized the foot and delivered the infant, a female. After unwinding several coils of cord about the child's neck, two clips were placed upon the funis and the latter severed between them. While raising the child from the uterus and already before the face could be entirely lifted out, the infant began to cry, so that no efforts at all were required for resuscitation. Up to this point four and a half minutes had elapsed since the beginning of the operation. No difficulty at all was encountered in the birth of the placenta, and the uterine cavity was easily freed from shreds and clots. The uterine incision was closed by interrupted silk sutures, while that in the abdomen was closed with continuous cat gut in the peritoneum and silk worm gut in the remaining layers. The dressings were applied and the patient returned to bed in an unusually good condition, having been upon the operating table just twenty-seven minutes in all. Of the subsequent treatment of this patient nothing need be said since her recovery was quite uneventful. Milk appeared in the breasts at the usual time and in abundant quantity so that

the child could be easily nursed. At birth the child's weight was $6\frac{1}{2}$ pounds. The size of its head was in every measurement that of the average child at birth, but the head exhibited the usual symmetry of an infant whose mundane advent had been *over* instead of *under* the pubic arch.

The second case was that of O. F., a mulatto girl of fourteen years. This small, frail and undeveloped child had been the subject of rape on October 18, 1904. The mental development of this patient was somewhat below par, and quite puerile. Her height is fifty-eight inches. At the obstetric examination made at the time she was seven and a half months pregnant, it was elicited that she had reached puberty at the twelfth year of her age. Since then the periods had recurred with more or less regularity, continued about four days, and were attended by some pain in the lower abdomen. As above stated, the date of the rape and the only occasion of coitus was on October 18, 1904. The last menstrual period was in September previous. According to this the date of her expected delivery was estimated to be July 25, 1905. The bodily outline of the patient was puerile and she had not yet attained the female type, her pelvis particularly appearing small. On palpation and auscultation the fetus at this time was found to occupy the left occipito anterior position. The pelvic measurements were as follows: Inter spinous diameter 8 inches; inter cristal $8\frac{3}{4}$ inches; external conjugate diameter $6\frac{3}{4}$ inches; the diagonal conjugate 3 inches; the internal conjugate $2\frac{3}{4}$ inches. The inter trochanteric diameter 10 inches; the left oblique 7 inches, and the right $7\frac{1}{2}$ inches. The fetal head measured through the abdominal walls, was estimated to be quite as large as the average child at this stage of pregnancy. The genitals of this patient were infantile, having the close approximation of the fourchette to the meatus urinarius which characterizes that period of physical development. The introitus vaginæ was so small as to barely admit one finger, and the introduction of two fingers was impossible.

This patient was operated previous to the time originally estimated to be the end of her pregnancy, for on July 10, 1905, she was overtaken in labor, and was operated at once, after the usual preparations. It will not be necessary to recount the operative procedures in this case, since the technique was similar to that employed in the former case. A few points however

merit attention. On account of the unusually short distance between the symphysis pubis and the umbilicus, it was necessary, in spite of my contrary desire, in order to obtain sufficient room to deliver the child, to lengthen the abdominal incision to an inch above the umbilicus. At the same time it was found that the uterus was remarkably elongated upwards, so that the only field presented for the uterine incision was rather low down upon the anterior wall of that organ. The uterine incision was therefore of necessity made much lower down than I would deliberately select in another case, and the hemorrhage from the incised uterine muscle was somewhat freer than I have heretofore seen it. Another condition causing some momentary embarrassment was the fact that the bladder was found well up out of the pelvis, having been drawn there by the uterus in its upward development, and the bladder also contained quite a quantity of urine which had to be withdrawn by the catheter, although the patient had been catheterized just before beginning the anæsthesia. The amniotic fluid was quite scanty in amount. The child, a female, was found lying in the position previously diagnosed, and was delivered in the classical manner advised. In this case the placenta and its membranes were more firmly adherent to the uterus than I have previously seen them, and it became necessary to examine closely for the line of separation; a rather free hemorrhage also attended the placental stage. On this account ergotol was administered hypodermically as a prophylactic. A dilatation of the cervix sufficient for the purpose of drainage was revealed while freeing the uterine cavity from clots and membranous shreds; so the operation was terminated in the usual manner, except the application of the uterine suture. This was carried out with great care by first placing a row of silk sutures, passing through the uterine wall but not including the mucosa, and this row was then fortified by a series of superficial silk sutures between those of the deep row. I might say that this procedure prolonged the time of the operation considerably, but seemed to be justified in order to overcome the risk arising from the necessarily low incision. As above mentioned, the patient had to be catheterized during the operation and this also entailed the loss of some minutes: but after deducting this time, three and a half minutes were required for the delivery of the child, and the patient was upon

the operating table forty-three minutes in all. The infant, a female, weighed five and a half pounds immediately after the operation. I was much interested in the size of this child's head in view of the indications for the Cæsarian section in such cases, and consequently measured it with great care. The measurements of the several diameters of the fetal head were those of the average child at birth. The child's body, however, was somewhat smaller than usual, and this accounts for its small weight. The condition of the patient subsequent to the operation was good and her recovery unimpeded except by a rise of temperature absolutely unassociated with any evidences of infection, but attended by some gastric disturbance induced without doubt by some beef broth given during the end of the first week of the convalescent period.

The third case of Cæsarian section to be reported at this time, and the fifth which I have had occasion to operate thus far¹ is that of M. H., white, 35 years old, nullipara. She is 57 inches in height. Her physical development is imperfect, and mentally she is also deficient. Puberty occurred when eleven years old. According to her statement she menstruated last on March 20, 1905, but if this be true she menstruated several times after conception. At the obstetric examination the child was found lying in the right occipito posterior position, and the head projecting forward over the pelvic brim. The cervix was small, and located high up in the pelvis. The pelvimeter showed the following measurements: inter spinous diameter 10 inches; inter cristal $10\frac{1}{2}$ inches; external conjugate $6\frac{1}{4}$ inches; diagonal conjugate 3 inches; true conjugate $2\frac{1}{2}$ inches.

On the evening of August 18, 1905, I was informed that the patient was having slight labor pains since the previous night, at very long intervals. On the following morning the pains were about a half hour apart and not very severe. On vaginal examination the cervix had disappeared and the os was dilated about three-quarters of an inch. At the time the Cæsarian section was undertaken the patient had been having labor pains about thirty-six hours, and while they had effected a dilatation of the os to the extent indicated, the fetal head had

(1) See Transactions of *The American Institute of Homæopathy*, 1899, page 625.

not entered the pelvis at all, but lay upon the pelvic brim and projecting anteriorly, with the right parietal bone trying to enter the pelvis. The abdomen was opened in the median line through exceedingly thin abdominal walls, and the place for the uterine incision carefully selected so as not to be placed too low. When the unruptured fetal membranes were reached they appeared yellowish instead of bluish as in my other cases. The infant, a male, was extracted by the feet. In this case the child did not cry on being delivered, but was white and breathless, and gave the nurse some little difficulty to resuscitate it, but this was ultimately accomplished. Several factors may have been conjointly operative in producing this condition. On beginning the ether anæsthesia the patient had considerable bronchial irritation shown by a constant short cough with much mucus in the air passages, necessitating a slow anæsthesia. Furthermore, the patient had been allowed to have labor pains for thirty-six hours before the operation, and these ineffectual pains, while not severe, had been expended upon the head, distorting it considerably by forcing it upon the pelvic brim. The placenta was attached to the left upper part of the uterus, and was delivered without any difficulty. The accompanying hemorrhage was if anything less than that attending a normal birth. Two rows of interrupted silk sutures were applied in the uterine walls. During their introduction the uterus contracted with great rapidity. Seven minutes elapsed in this instance until the delivery of the child, and twenty-five minutes until the closure of the abdomen. The weight of the child was seven pounds, and it was estimated to have been born about two weeks prior to the end of normal gestation. The recovery of this patient has been entirely without incident.

There are so many points relating to this interesting operation of the Cæsarian section which invite attention, that the time limit for this paper would be greatly exceeded if even an incomplete consideration be given them, and consequently it is necessary to pass by all of them, excepting two which have a distinct concern for those engaged in ordinary obstetric practice.

Indications.—The indications for the Cæsarian section are said to be *absolute* and *relative*. As succinctly stated in *The American Text Book of Obstetrics* (p. 918), "The indication is *absolute* when it is impossible to extract the fetus, either liv-

ing, dead, or mutilated, through the natural passage. This may be the case in extreme pelvic contraction from arrested development, rickets, or osteomalacia, or where the passage is blocked by tumors of the pelvis (osseous) or of the uterus and the soft parts (carcinoma, fibroma, etc.)” Without going into a detailed discussion of the indications based upon measurements we may accept the statement of Kelly² as approximately representing the views prevailing among operators to-day. He says: “The indication is absolute and the Cæsarian section must be performed when there is a living child in a flattened pelvis with a true conjugate diameter of 6.5 cm. (2 $\frac{5}{8}$ inches) or less, or in a generally contracted pelvis of 7 to 7 $\frac{1}{2}$ cm. (2 4-5 to 3 inches) or less”

In respect to the *relative* indications, as the former authority states, it is difficult to formulate them, and they must generally be determined by the individual peculiarities of the case. A degree of pelvic contraction or obstruction less than is requisite to constitute an absolute indication, but yet sufficient to make the safe delivery of a living and viable child by the natural passage doubtful, may be considered a relative indication. A conjugate of 6 to 8 cm. (2 1-3 to 3 1-5 inches) and tumors of the pelvis or of the soft parts causing moderate obstruction are the commonest relative indications.

So also v. Braun-Fernwald³ says: In reference to the relative indications dependent upon the measurements of the conjugata vera as indication for undertaking the Cæsarian section, they cannot be readily fixed. It depends upon the form of the pelvis and its size, as also upon the relative size of the child and the firmness of the head, and particularly upon the activity of the labor pains; besides in multiparæ the history of previous births must be considered. Leopold accomplishes good results with version and extraction in the Walcher position with 7 cm. (2 4-5 inches) for flat rachitic pelvis, and 7 $\frac{1}{2}$ cm. (3 inches) in generally contracted pelvis; but adds that these limits cannot be accepted as fixed since in each case the question must be specially decided. V. Braun-Fernwald admits not having had favorable experiences with such small measurements. This difficulty of accurately fixing the relative indica-

(2) Kelly: *Operative Gynecology*, Vol. II, 415.

(3) Arch. f. Gyn. Vol. 59—323.

tions according to pelvic measurements, can readily be appreciated by those familiar with the practice of pelvimetry.

The Time to Operate.—In ancient times the Cæsarian section was performed immediately after the death of the mother. In recent years since the antiseptic method has given preponderating chances of success to surgical intervention in abdominal diseases, and even after the improved technique of Säger had made the operation not only a justifiable but an imperative measure in the fullness of the practice of the obstetric art, the belief prevailed that it was necessary to await the onset of labor pains before this operation could be undertaken with safety. Conformity with this belief gave rise to some amusing occurrences and was often associated with much inconvenience to operators, and occasioned not a little risk to the patient from incomplete preliminary preparations. After a number of operators, however, had ventured to pin their faith to the unchangeableness of physiological processes, daring to operate in the absence of pains, and had good success, it became evident that the advent of labor was not a prerequisite for a successful Cæsarian section. On the other hand, while it is true that the uterus contracts even after being suddenly emptied and the woman does not die from hemorrhage as was formerly feared, yet it probably is better to operate after the pains have begun, not in order to avoid fatal hemorrhage, but in order that contractions may have operated in some measure upon the cervix and os uteri and have effected a certain amount of dilatation commensurate with safe drainage for the lochia.

Now a word in regard to operating cases which have been in labor a longer time than above indicated. Knowing as we do the great likelihood of infection in cases of prolonged labor, we cannot expect the patient to have the same chances of unimpeded recovery under these circumstances. The patient should have been examined as little as possible and only with aseptic hands; for if infection has taken place, there is presented one of the indications for the Porro instead of the conservative operation which notably is attended by greater risks. Indeed v. Braun-Fernwald believes it is not justifiable to do the conservative Cæsarian section after other attempts at delivery have been made, and he cites some evil results in published cases where this was done.

He therefore believes it is requisite that the woman should

have no material rise in temperature and pulse rate. On the other hand he does not require that the waters shall still be retained or have been discharged but a short time before beginning the operation. He has operated twelve cases in which the membranes had ruptured from two to nine hours before the operation; and in one case fifty hours had elapsed. In the latter case there had been some rise of temperature, but just before the operation the temperature was only 99.5°.

Zacharias,³ in writing about cases at Menge's clinic, also advises that all other attempts at delivery should be avoided, and no internal examination should be made before operating. Veit takes his cases into the hospital three weeks prior, and advises not to make any attempts at premature delivery. Such then are the views of quite a number of operators concerning this point, and many more could be quoted. You will notice that these recommendations are based upon the idea of avoiding infection, and are in accord with the very latest views of obstetric practice in general.

In this connection a recent article by Voorhees, of New York,⁴ is of interest. He has reported seven cases of Cæsarian section. In one of these cases he made an unsuccessful attempt at delivery by means of the modified Champetier de Ribes balloon four days before, and then operated the woman successfully by the conservative operation. He says many obstetricians would have ruled out the Cæsarian section for fear of sepsis. In another case labor was started with the balloon and then the conservative operation performed. On the eighth day a stitch abscess developed at the lower end of the wound. On the thirteenth day hysterectomy was done, at which time the uterus showed no signs of suppuration and only localized peritonitis about the uterine and abdominal wounds. The patient died thirty-six hours later of pyæmia which he believes resulted from the stitch abscess or possibly from previous meningial trouble during a former pregnancy at which time the patient was insane. It is probable that no one not having a full knowledge of all the circumstances of this case is competent to judge it with certainty, and yet these cases deserve consideration in connection with the point under discussion.

(3) *Arch. f. Gyn. Bd.* 72, 509.

(4) *Amer. Jr. Obs.* Vol. LII, 161.

In a third case labor pains were induced with the balloon and later by the use of a bougie. Two days subsequent to the onset of the induced labor the conservative operation was performed. The patient did well except that she had some intestinal paresis for forty-eight hours and also had a dry pleurisy from pulmonary infarct. Voorhees furthermore definitely states that in some of these cases, we must take the chance of infection, for the patient must be given the test of labor, he says. This subject cannot be discussed at present, but after what has been said it seems after all to be the safer plan whenever possible not to precede the conservative operation by any other attempts at delivery. This leads me, in conclusion, once more to urge upon all engaged in the practice of obstetrics the adoption of the preliminary obstetric examination, as a routine procedure and especially its most important feature, namely, pelvimetry.

OCULAR DEFECTS; THEIR RELATION TO MENTAL BACKWARDNESS IN CHILDREN.

BY G. W. STEWART, M. D., PHILADELPHIA.

(Read before the Homoeopathic Medical Society of Pennsylvania, September, 1905.)

By mental backwardness, is here meant that condition the mind suffers during its formative period, by reason of defective sense organs imparting faulty perceptions, and thereby protracting the period of the development of discriminative or completed knowledge.

A thorough comprehension of such a retarded mental evolution, is impossible in the absence of an accurate understanding of the all important role played by the sense perceptions in the upbuilding of a rational human intelligence.

There is perhaps no one fact so liberally conceded as, that consciousness is the offspring of experience. The obverse of consciousness, relatively speaking, is nothingness. Consciousness is first awakened by the sensation of an internal response to an external stimulus. Such a sensation constitutes an experience. If the organism be capable of receiving a variety of impressions differing in quality, the scope of consciousness is correspondingly amplified. In proportion to the number and variety of sensations experienced, in that degree is the external world unfolded to nascent consciousness. To render possible an internal response to external stimuli, it involves of ne-

cessity that there be a medium of communication. In the higher and more complex organizations, the media of communication are exclusively the more or less highly developed organs of special sense. In the absence of these special senses, the development of what we know as mind is inconceivable. By the term "Mind" we crudely convey the idea of thought, and thinking, and by "Thought" we express that operation of the mind, in its endeavor to correlate experiences and define them to itself in the terms of consciousness. "Intelligence" is simply an index of the mental capability to rearrange the received impressions, and in turn transmute them into judgments that shall govern acts, and formulate idéas.

No one will deny, that from the earliest dawn of consciousness, up to the highest developed intelligence, there is an unceasing and constantly accumulating stream of sensations, impressions, experiences, being transmitted from external sources to the internal recipient, mind, conveyed thereto through the avenues of communication, which are exclusively the special senses. And moreover, that without these communicating tracts, the evolution of intelligence, mind, even consciousness itself is impossible, indeed unthinkable.

Admitting this to be an unalterable fact, it is rational to insist that a prerequisite to the development of a relatively perfect intelligence, is a relatively perfect physical development of the organs of special sense, and conversely, it logically follows that defective sense organs must and do transmit defective impressions, and furthermore, that within a consciousness thus developed, the thinking faculty inevitably constructs its standards upon defective data; subsequently leading to faulty judgments and imperfect ideas.

The sphere of perception is the entire realm of external phenomena. All that we can ever know of the world of sensible objects, we apprehend through the instrumentality of those bodily organs, whose function it is to convey to the mind a perception of the material things with which they come into contact. The perception of an object by the mind, is the first step in the elaboration of a knowledge or understanding of the thing presented. Upon the accuracy and clearness of the perception, rests fundamentally the power to formulate accurate conceptions of the attributes of things, and by intelligent association, and comparison of their characters common and un-

common, to assign them their proper place in the world of phenomena. Such a mental act combined with judgment constitutes knowledge, and knowledge is the desired end in the early training and education of youth.

It is a common saying that "our youthful impressions are the most lasting." That such may be the case is conceivable, when we remember that in the plastic and as yet immatured mind of infancy, the sudden bursting in of perceptions of unique and novel forms, and dimensions, create the impressions that are to become the basis upon which the subsequent discriminative intelligence is founded. Through one or more of its communicating channels the child perceives an object. It does not *know* it, in the sense of intelligent cognition. There is presented simply a mental picture, corresponding in some degree with the nature of the external object from which the stimulus emanated. The accuracy and truthfulness of this perception is proportionate to the ability of the sense organ to accurately transmit the stimulus. In this manner the substratum of knowledge is laid, and for this reason the earlier impressions are ever the clearest, inasmuch as they constitute the permanent standards wherewith matured judgments are made and compared.

Enough has thus far been said, and persistently reiterated in altered phraseology, to emphasize the conclusion that the basis of an accurate mentality, is an equipment of physically perfect organs of special sense. Take as example, two children possessing originally equal brain potency, the one having relatively perfect sense organs, the other having uncorrected deficiencies in one or more of them. The former will inevitably outstrip the latter, ultimately, in acquiring habits of exact mental discrimination. This species of mental backwardness in the latter, can be ascribed only to inaccuracy of perception. A concrete illustration is presented in the case of two artisans having equal skill, but being unequally equipped with the tools necessary to their art. No one will venture to assert, that if the Chaldean Astronomers had possessed the apparatus of Prof. Pickering, that their deductions would have been less accurate than his own. And yet from the standpoint of accuracy, the Chaldean, lacking instruments of precision, is far in the rear of the modern observer. The analogy here holds good for the human brain, which is a veritable observatory.

Within its dark and obscure enclosure, the mind takes cognizance of the images presented to it. The only instruments wherewith it holds communication with the outer world are the five special sense organs. Whether the images presented be true or false the mind has no conscious means of determining. They are the working material out of which it constructs its final conceptions, eventually to be synthetized into completed knowledge. "What the senses perceive, that to the thinking mind is true."

The special senses are five in number. Each of them having as its special mission the conveying to the consciousness an attribute of matter. Occlusion, or defect of any one of them, at the period when consciousness is first awakening from its unconditioned sleep, very obviously either obscures entirely or falsifies in some degree the perceptions necessary to a normal understanding of the world of objectivity.

With the exception of the sense of vision, all of the other senses convey their impressions to the mind as sensations. The stronger the perception, the weaker the sensation; the stronger the sensation the weaker the perception. In sight, there is a maximum of perfect perception, and a minimum of sensation. In viewing an ordinary object we are not conscious of any feeling, although we are conscious of a decided knowledge of its attributes; the knowledge of its proximity to us, of its form, size and color, is perfect beyond that given by all the other senses combined. Audition conveys much less knowledge than vision, and at the same time far more sensation. In all of the other senses, feeling greatly predominates, the perceptions being correspondingly slight. Thus we observe that Vision is pre-eminently the most important factor in the evolution of conscious intelligence.

The physiological function of the eye is to convey a sensation which we term "light," moreover, as all external objects reflect light, the consciousness is enabled to perceive not only the existence of light, but likewise the direction from which it proceeds, together with the color, form, size, and distance of the luminous object. The apparatus essential to this accomplishment is necessarily of exquisite sensitiveness, and capable of the most accurate adjustments. Any inequality however slight in the complicated mechanism, results in a disturbance of the harmonious balance, and a consequent perversion of the trans-

mitted sensations affecting our consciousness. If such perverted impressions be transmitted in early childhood, during the mentally formative period, the disastrous effects upon the subsequently evolved powers of discriminative judgment will sooner or later become apparent.

Intelligence is based upon the knowledge of a thing in relation to its attributes, or to some other thing. To make comparisons of objects involves that they occupy different points in space. The consciousness of space is derived from the refraction of light vibrations upon a definite point on the retina. This infinitely minute irritation localizes the point from which the radiations emanate. By bringing the muscular mechanism into play the spatial perception is materially assisted, the eye travels from one point on the object to another, and to different objects, and from the size and shape of the microscopic retinal image, the mind is enabled to judge the spatial relations of the thing perceived. Hence, accurate spatial perception is dependent upon normality of refraction, and harmony in the muscular adjustments.

The perception of distance depends to a great extent upon a knowledge of actual size. Knowing the dimensions of an object we judge of its distance by the size of the retinal image. Distance can be judged only by comparing the image on the retina with the known size of the object, or with another object with which the mind is familiar. The accurate perception of distance requires a considerable degree of experience in comparing the spatial relationships of sensible objects, which imparts a knowledge of size. The judgment is aided in this respect by the act of accommodation, which enables us to estimate relative distances with comparative accuracy, within two or three metres distance from the eye. Children, from lack of experience, and from faulty perception, are liable to constantly misjudge distance.

The estimation of areas and angles is similarly one of comparison, and involves accurate perception to formulate accurate standards of judgment.

Intense illumination apparently increases the size of an object. If the eye receives too little or too much light, the accuracy of spatial perception is affected. Error in this respect may ensue from defects of the retina, pupillary reaction, and of refraction.

It is not within the scope of this paper to discuss at greater length the truly vital significance of an accurate conception of space, distance, form, size and color, in the evolution of mind and intelligence. For the present purpose it will suffice to assert that defects in the visual apparatus will inevitably in the degree of their magnitude, falsify the perceptions and thereby materially retard a proper mental development.

Mentally backward children are not necessarily mentally deficient. Neither are all mentally backward and mentally deficient children wanting in a relatively perfect development of the special sense organs. If, however, we exclude those who are simply healthfully indolent, who evince a disinclination for study and the discipline of school life, and, on the other hand, those who inherit a low grade intelligence, or are the victims of congenital degeneracies, it will be found that in a large percentage of the remainder there exists a defectiveness in one or more of the organs of special sense.

An examination of the children in the Philadelphia Public Schools, made by the Medical Inspectors during the past year, developed the fact that among the non-exempt pupils, 29.31 per cent. exhibited defects of the sense organs, while in the exempt pupils the percentage of these same defects fell as low as 7.7 per cent. Moreover, among the defective non-exempt, 50.9 per cent. exhibited defects of the visual sense. Had this examination been conducted with the end in view of determining the causes that contributed to non-exemption, and had the healthfully indolent, truant, and mentally deficient pupils been separately classified, it would doubtless have been discovered that mental backwardness, in the sense here under discussion, was associated with defectiveness of the sense organs in nearly every instance.

Unfortunately, the literature of ophthalmology is singularly meagre in reference to this important relationship of ocular defects to mental backwardness. It has been generally assumed that defects of sight and hearing are simply annoying obstacles, and the importance of their early correction is too often overlooked and neglected. A consideration of the serious consequences entailed upon the developing mind, by reason of faulty sense perceptions, will inspire the intelligent physician with a deeper consciousness of his duty towards children, and prompt him to urge upon parents the importance of the early correction of defects when found.

Minor defects are rarely discovered until the child has reached the school-going age. Prior to this, the impressionable mind has been the recipient of false images, many of which will perhaps be permanently retained. In the sub-conscious mental effort to rectify these faulty perceptions, the mind experiences confusion, with the result that clear, direct and accurate habits of thought become impossible.

Errors in refraction and errors in the muscular adjustment should, whenever feasible, be immediately corrected.

When such a procedure is universally observed, thousands of little victims of faulty sense perceptions will be spared the humiliation of being classed as mentally backward, and in addition, and of infinitely greater importance, the grade of their intelligence will be lifted to a much higher plane.

DISEASES OF THE GENITO-URINARY ORGANS WHICH MAY DEMAND OPERATION THROUGH THE PERINEUM.

BY LEON T. ASHCRAFT, A. M., M. D., PROFESSOR OF GENITO-URINARY DISEASES, HAHNEMANN MEDICAL COLLEGE, PHILADELPHIA.

(Read before the Homoeopathic Medical Society of Pennsylvania, at Altoona, September 20th, 1905.)

HAVING done quite a number of perineal operations for various diseases of the male genito-urinary organs, I have decided to enumerate them, together with reasons for operating.

In plastic work, in the anterior urethra, such as operations for epispadias or hypospadias, or the excision of a stricture perineal cystotomy is indicated as a preliminary measure, since it diverts the urine from its normal channel, thus preventing sloughing of the sutures. It is also employed where traumatism produces a rupture of the membranous urethra, as well as in structures about the bulbo membranous junction, which are not amenable to dilatation. It is likewise imperative in urine infiltration and extravasation. It is distinctly indicated in chronic posterior urethritis of gonococcic origin, where despite our best directed efforts, subacute outbreaks occur. In relapsing epididymitis it is curative, since it drains the prostatic urethra of the accumulated products of the ejaculatory ducts; in a similar way it markedly benefits seminal vesiculitis.

I believe it to be the ideal route for evacuating either a prostatic abscess or the foci of chronic suppuration in that organ.

Five years ago (some time before Chetwood invented his operation) I pointed out the value of perineal cystotomy as a preliminary to the Bottini operation for hypertrophy of the prostate,* and have since practiced it with very satisfactory results; as the chosen route for prostatectomy it bears the weighty endorsement of Proust, Zuckerkandel, Guyon, Cathelin and others quite prominently identified with this work, as well as most of the genito-urinary surgeons of this country. While it is not my unvarying custom to thus operate, yet I have removed quite large tumors by this route. As a means of curing many diseases to which the bladder is subjected, its value is undeniable. Contracture of its neck may thus be corrected, and, too, calculi may thus be removed. It also affords a means for curetting ulcerated areas. I have already mentioned its value in chronic non-obstructive cystitis; here it is serviceable because it drains perfectly obedient to the law of gravity. Especially is it indicated in chronic irritability of the vesical sphincters, a cure resulting by forcibly stretching these muscles, thereby temporarily paralyzing them and putting them at rest. The operation should always be employed for bladder exploration where cystoscopy is impossible. Particularly and emphatically do I value perineal cystoscopy for palliating urinary symptoms in old and enfeebled men, who are slowly dying from the results of a severe and prolonged cystitis. Many such cannot stand a prostatectomy or a lithotomy, or even continue to use the catheter, but they do rally from this operation when quickly made, with a consequent temporary lull in their distressing symptoms. Under such circumstances it becomes a necessity.*

Having discussed those conditions which demand surgical interference, it may not be amiss to refer briefly to some technical points, since such may be either simple or difficult.

In these days it is almost superfluous to mention that a pre-operative toilet is carefully made. A general anæsthetic should be given, except when age and depressed vitality forbid it; here I have been occasionally compelled to use cocain, thereby causing but little distress. The simplest perineal operation is

*The Bottini operation for hypertrophy of the prostate, a modification of its technic. Transactions American Institute of Homœopathy, 1900.

that employed to cure chronic cystitis where no appreciable obstruction exists, and all others pattern after this, differing but slightly in detail.

The lithotomy position is selected; the feet are fastened with anklets, or, preferably, held by assistants; a staff or guide is passed into the bladder, and held in place by an assistant, who also lifts the scrotal contents towards the upper surface of the perineum. The incision should be made in the *Raphé*, about one inch above the anus. Careful dissection through the deep fascia will reveal the urethra, which is then incised. The staff is then withdrawn and the index finger inserted through the incision into the bladder, thus forcibly stretching its neck. Should too much contraction exist it will be necessary either to incise it, sear it with the Bottini knife, or divulse it with an especial dilator. The operation is completed by passing a drainage tube into the bladder and packing the wound with gauze. I usually employ a double drainage tube, made by stitching together two ordinary rubber tubes; this makes perfect drainage and irrigation possible since by hanging a fountain syringe or an irritator to the head of the bed and inserting its nozzle into the perineal tube, a constant flow may be maintained for hours, a desideratum in the event of clots or hæmorrhage, and sometimes a necessity in the treatment of cystitis. Unless urinary septicæmia or marked spasms occur, the tube should be retained for a week, when it should be removed and sounds passed into the bladder per urethra every five days until the wound closes. This method is usually employed, varying, naturally, with individual requirements.

Occasionally, however, hæmorrhages arise and consequently shock; such, however, indicates poor work, since in entering the bladder it is unnecessary to wound any vessels. Indeed, it is almost unnecessary to employ hæmostats. This complication, however, is controllable by the irrigation device previously mentioned, using very warm one-half normal salt solution. Urinary septicæmia may occur, due either to careless preparation or to poor work. Its presence requires antiseptic irrigation and the administration of Aconite. Vesical spasms may arise, but will not if the operator takes the precaution to thoroughly stretch the sphincters; such, however, may be controlled by administering Belladonna and employing irrigations. Should such means fail the tube must be replaced by one of smaller calibre or be removed entirely.

Rarely fistula may follow, due possibly to a too long retained drainage tube; this is an unfortunate complication, and one requiring painstaking care for its eradication; its discussion is not within the scope of this paper.

Departures from this technic are taken when one meets with certain types of strictures situated in the bulbo membranous region, such as hard, dense, fibrous strictures, or those of fili-form calibre, or those practically impassable, or where fistulæ exist. Here attempts must be made to pass some instrument. Usually, after repeated efforts, a filiform will enter the bladder; this is threaded into a tunnelled staff, which is then used as a guide for perineal section, or the stricture may be divided within the urethra with a maissoneuve urethrotome or the operation of Wheelhouse must be made, which, briefly, means passing a tunnelled staff with a rounded and curved end to the face of the stricture, then carefully cutting until the urethra is exposed, then entering the knife above the strictured area and dividing the constricting bands. In some instances it will be impossible to pass any guide to or beyond the stricture, in which event it is usually necessary to operate blindly. The left forefinger should be inserted into the rectum, locating the lobes of the prostate; an incision should then be made in the Raphé and a careful search made for the entrance into the bladder. Such conditions necessarily increase the risk of operation, but having once entered the bladder the technic practically is the same as that outlined in my description of perineal cystotomy.

It must not be understood that I present a panacea for urinary diseases. I am simply enthusiastic about an operation which I have practiced many times with most satisfactory results.

LACHESIS.

BY M. M. FLAGLE, M. D., HANOVER, PA.

(Read before the Homœopathic Medical Society of Pennsylvania at Altoona, September 20th, 1905.)

SHOULD any Homœopathic physician be asked to name a drug essentially Homœopathic in its origin and use, he could probably not do better than cite the *Lachesis Trigonocephalus*, a drug whose wonderful medicinal properties stand out clear

and pure, a living monument to the efforts of one of the greatest Homœopathic physicians the world has yet seen—Dr. Constantine Hering.

Lachesis is a remedy with a wide range of action, frequently indicated and one we will need to study much in order to know how to use.

The venom of Lachesis is a Septic poison of *astounding energy*, attacking the *Cerebro-Spinal* nervous system with *great violence*, the effects reaching over, as it were, and rapidly involving the *Sympathetic* nervous system, thus undermining the very foundation of life.

When we study the finer (curative) action of Lachesis on the human body however, it seems to fit pretty nearly the whole human race, for there is much of the serpent in man, both in his character and disposition. Note the low-mindedness, the lust, the insanity, the self-conceit, the envy, the hatred, the revenge, and the cruelty of man, the very serpent leading man away from all that is good and pure.

You will not be surprised therefore at the effect of Lachesis on the *Mind*. The mind is overwhelmed with suspicion and jealousy, jealousy and suspicion even of one's nearest and best friends, jealousy without cause.

Many insane people need Lachesis. It may be religious insanity, Puerperal Mania, or the delirium of any of the diseases associated with blood-poisoning, but whatever the form, it is characterized by an exaggerated mental state. Thus the patient is constantly talking, always hurrying, cannot do things rapidly enough, leaves sentences half finished, jumping from subject to subject, must hurry onward, *great loquacity*, (Agar. Stram. Act.—Rac.). Thinks she has committed the unpardonable sin, etc. There may, however, be melancholy with hopelessness and despair, especially in young girls who have met some great disappointment, and the patient becomes indifferent to everything (a state of apathy).

Lachesis is a drug which possesses many striking and characteristic modalities: for instance, many symptoms are *worse after sleep*, or the patient *sleeps* into an aggravation of his complaints, and nearly all diseases in which Lachesis is indicated, will, at some time, manifest this peculiarity. Another characteristic modality is its tendency to affect the *left side* of the body, but the most peculiar thing is, that the symptoms

tend to *travel from left to right* (Plumbum, Sabadilla, Spigelia). This point I want to impress, for many remedies act more on the *left* side of the body than on the right, but *few* remedies travel from *left to right*.

The Lachesis patient is *worse* from *heat* whether radiated, or from warm food or drink. He is also worse in the *spring-time*; his complaints though better in winter, rouse up in the spring just like the snakes.

On account of its action on the nervous system, you will find *great sensitiveness*. This condition qualifies many symptoms, and is characteristic. The patient is easily disturbed by any noise or sound, and the *least touch* is unbearable, anything tight around the neck is intolerable, and the patient must loosen his collar, or wears none. This characteristic is general, no matter in what part of the body the sensation manifests itself. We may say, therefore, that Lachesis *antagonizes all constriction*. You will be surprised to know, however, that notwithstanding this extreme sensitiveness to the least touch, the symptoms are *relieved by hard pressure* (if made by the patient himself). This partly explains the modality of the throat symptom so characteristic when Lachesis is indicated, viz.: "Pain *worse* when swallowing *saliva*, but *better*, or even *relieved* by swallowing *solids*." Many other modalities might be named here, but time forbids.

From the *generals* of this remedy we come to the *particulars*, and cite some conditions in which Lachesis has brought many brilliant cures. You will find Lachesis a great remedy for disorders occurring during the period of the Menopause.

Let us look at a type of case frequently met with:—A woman 42 to 50 years of age enters your office. You will instantly notice her extreme nervousness. She cannot sit quietly, she moves her hands or her feet constantly, and fans violently. Her face is deeply flushed, or almost purple, and she seems as if she would suffocate. A warm room is simply intolerable, she must have fresh air and feels better from it. Her whole body seems in a tremor, the muscles of the face twitch, her voice even trembles, and she can scarcely protrude her tongue, it trembles so much. She will tell you that sounds, even of music, nearly distract her, and she must remove the clock from the room, as the ticking annoys her (compare Coffea, Nux. Vom., Theridion, Borax, etc.). She

lies awake nearly all night, cannot sleep, or if she does perchance, she awakes with a raging headache, and nausea.

This great nervous tension continues until the *flow begins*, when there is a wonderful *relief of all symptoms*. The symptoms of Lachesis are worse before and after the menstrual period, but better during the flow. I want to say here, that no matter what the nature of the disease is, if the symptoms are relieved by flow of blood or by any discharge, we should think of Lachesis (*Zincum*).

If, in the foregoing case we find *flushes of heat*, with tendency to *fainting spells*, there is probably no remedy in the Materia Medica that can compare with Lachesis in relieving these symptoms, but it must be used in potency to get the quickest and best results.

We sometimes meet another class of cases which are very difficult to handle, and which are also apt to be associated with the Menopause. In these cases we find profuse hæmorrhage at each menstrual nixus, the blood being *dark*, in fact almost *black*, sometimes partly coagulated and partly fluid but always dark in color. Mark this well. Now, this patient keeps flowing more or less in quantity for two or three weeks at a time, then a week or ten days intermission, then flowing again for two or three weeks, and so on for months, until finally the patient is in a desperate condition, in fact almost exsanguinated. Examination may reveal the presence of fibroids, or some malignant tumor, but the hæmorrhage may also be *vicarious*, passing off through the bowels, or some other organ, but no matter what the condition is, or from what organ the hæmorrhage occurs, if the blood is dark (or black) other symptoms corresponding, Lachesis is a remedy to be thought of and prescribed in medium potency, and the results will not only astonish you, but the patient also.

On account of the action of Lachesis on the blood, causing rapid decomposition, we find it indicated in the lowest and most malignant forms of disease, whether it be malignant diphtheria, scarlatina, erysipelas, septic conditions, or typhoids. In these conditions the skin and mucous membranes take on a *dark-bluish* or purple color, the discharges become *very offensive*, there is tendency to hæmorrhages from all the tissues of the body, and these discharges are *black*, or at least *very dark colored*. Thus we have dark chocolate-colored stool. or

stool like charred straw; *black urine*, and even *bloody sweat*. Malignancy, then, just like the serpent itself, characterizes its effects on the human body.

Lachesis has a wonderful action on the *heart*. When after some acute disease, as for instance pneumonia, or diphtheria, the patient in her weakened state, over-exerts herself, do not be surprised to be sent for hurriedly, but go at once, for you will find your patient almost breathless, the chest heaving, and the heart beating so rapidly that you cannot count it. Most *violent palpitation*, easily visible through chest wall, for the patient will have torn her clothing from her neck and chest, and to her suffocation seems imminent. You will find her sitting upright or leaning slightly forward, for she cannot lie down. She must have air, and wants to be fanned, but strange to say you will find the person fanning, at quite a distance from the patient, and *fanning very slowly* (rapidly—Carbo-veg.) for any one coming near to the Lachesis person seems to take away her breath and much air from fanning would do the same thing. Fear and anxiety are written all over her countenance, and she feels that she would die. If perchance the palpitation should cease, the least motion or excitement will renew it. If the patient drops off into a little sleep, she seems to stop breathing (Amm-carb., Grindelia, Lac-can., Op.), and wakes up suffocating. The patient also complains of a very sore or cramp-like feeling around the heart. Now, friends, in such cases as these you may prescribe Lachesis with great confidence, but I want to give you a warning, and that is, that when there is a true organic affection of the heart, with tendency to failure of heart action, *do not give Lachesis*, for it will surely hasten the death of your patient.

There is a symptom found under Lachesis to which I would like to call your attention, principally on account of its sinister significance. It is this:—"Constantly obliged to take a deep breath." This symptom alone has often led me to suspect an oncoming Cerebro-Spinal Meningitis even when the other symptoms were yet masked, but no matter with what disease it is associated, it is always of serious import, as it denotes an impending paralysis of the pneumogastric nerves, and we should be governed accordingly in our prognosis of the case.

When the symptoms agree, Lachesis is a very useful remedy in carbuncle, or in blood-poisoning from malignant local in-

inflammation. In pneumonia with hepatization of the left lung, do not forget Lachesis, it will save the signing of some death certificates.

In low asthenic conditions Lachesis seems to stand between Arsenicum album and Carbo-veg.

Lachesis is a dreadful poison, and if repeated too frequently, especially in potentized form, its effects can never be antidoted.

Lachesis will not act with coffee, so you must prohibit it entirely, if you want the best results. Many remedies suggest themselves for comparison, but time forbids.

Only by strict individualizing of patients and remedies can we hope to attain to a fair degree of proficiency in prescribing. Let us then continue to study *all the symptoms of the patient*, so that the drug-image as well as the image of disease may stand out clear and distinct before our mental vision, and we will become more firmly grounded in the greatest therapeutic law the world has ever known.

THE VERSATILITY OF HEPAR SULPHUR.

BY WALLACE MCGEORGE, M. D., CAMDEN, N. J.

(Read before the New Jersey State Homœopathic Medical Society, at Atlantic City, October 5, 1905.)

THOSE who have studied Hepar Sulphur thoroughly, or who have used it many years, will readily see how versatile it is in its remedial action.

In a case of hypersensitiveness, when the patient will almost faint if you touch the sore spot; an eye case; a skin trouble; a croupy cough; a catarrhal affection of the lungs or bowels; a torpid liver or an irritable stomach; a disease of the mucous or serous membranes; some trouble with the glands or bones—what a variety! and yet Hepar is the remedy in each and all of these conditions.

Its action is prompt and lasting, as in the instance of a croupy cough, where a single dose in a high potency frequently cures. In the low potencies it often removes all the dangerous sequelæ of a neglected case of scarlet fever.

German writers contend that Hepar is good for torpid, lymphatic constitutions, when the muscles are soft and flabby, and the patients are slow in action. In lean people with bilious

complexions; in psoric scrofulous diathesis; in strumous, outrageously cross children. It is good when there is excessive nervousness from abuse of mercury, and it is also said to be good to remove the weakening effects of ether. In cases where the patient will faint while pricking a boil, or faint at the sight of a scalpel before the cuticle is touched, Hepar will promptly relieve.

In affections of the eye, Hepar is grand. In purulent conjunctivitis with proper discharge and excessive sensitiveness to cool air and touch, it is the remedy. The sensitiveness to touch and aggravation from cold air or damp air, runs all through this remedy. Hering, Hughes, Hartman, extol Hepar in these cases. Clinical experience has demonstrated that Hepar is very efficacious in the treatment of scrofulous ophthalmia. In an epidemic of ophthalmia neonatorum purulenta, with enormous œdema of the lids, intense inflammation of the palpebral conjunctivæ and profuse yellow or greenish purulent discharge, Hepar cured all the cases in from eight to twelve days. English, German and French physicians—that is the majority of them—use the low potencies, 2d and 3d decimal. I prefer the high dilutions. Dr. Vilas, one of our Western physicians, states that Hepar will cure more cases of keratitis than any other remedy. It is invaluable in the suppurative forms. It speedily absorbs hypopyon, and abscesses of the cornea require no other remedy. Dewey recommends it in affections of the eyes when there is red, thick margins of the lids, with little points of pus appearing at the roots of the cilia. Excessive soreness and sensitiveness of the lids is an indicating symptom. I have observed in those cases where little pimples break out around the lower lids, and keep extending, day by day, all the more surely will Hepar be the remedy. In ulcers of the cornea, when the patient flinches when you approach the eye even before you touch it, and complains of the pain from walking in the air to the office, Hepar works speedily and will cure the whole trouble.

Hepar expedites the discharge of pus already formed, while Silicea follows Hepar after the discharge has taken place, and completes the healing process. "Hepar not only arrests suppurative inflammations like Mercurius, but when suppuration is inevitable, it is used to hasten the suppurative process. This it probably accomplishes by promoting functional activity."

So wrote my classmate, Dr. H. S. Miller, in 1876, and it is yet true. He said Hepar was next to Mercurius in its action on the liver, being suitable for engorgement of the liver, and of the portal circulation, and especially for hepatic abscesses.

Dr. John C. Peters, in 1864, reported two cases of severe quinsy sore throat, one in an adult, the other in a young girl, which had progressed steadily in spite of Mercurius and Belladonna, which recovered with great rapidity under Hepar, second dilution, although suppuration seemed inevitable in both cases.

Dr. D. R. Gardiner, first President of the West Jersey Society, used to prescribe Hepar in the 12th dilution, in cases of quinsy where Mercurius failed to relieve in forty-eight hours. People came to his office for miles around to get his sore throat powders.

I find Hepar useful in quinsy when the throat is nearly closed with bright red inflammation, with prickling or sticking pains, when liquid swallowed runs back through the nose, resembling Lachesis in this symptom. I use the high potencies in all this form of throat trouble.

In many other throat affections, Hepar is just the thing. While in college, Lippe told us it was good when there was a sensation as of a fishbone in the throat. This symptom I have frequently verified in practice, and Hering gives it in his Guiding Symptoms. But when there is a fishbone in the throat, a pair of forceps would be the indicated helper, and not Hepar.

Kafka brought Hepar forward as the remedy for the dangerous sequelæ of scarlet fever, such as convulsions, dropsy, albuminuria, parotitis and cerebral disorders; and Lilienthal told us that Hepar in his practice has not only shown itself curative in dropsy, but for all the sequelæ of the scarlatinous poison. Kafka gives it a very wide range in these dangerous cases, and says: "The croupous inflammation of the nasal mucous membrane, so frequent in the stage of prurition and efflorescence, is quickest removed by Hepar. 3. a few doses daily; simultaneous swelling of the parotid and submaxillary glands; simultaneous visible decrease of the urinary secretion, with traces of albumen, or cylindrical tubulæ, are all further indications for Hepar. . . . By the use of Hepar, when during efflorescence, the secretion of urine becomes diminished, and the examination shows albumen, tube casts and blood globules in the urine, there being neither pain in the kidneys, nor severe fever, dropsy is kept off; the albumen

diminishes, the urine is more copiously secreted, and the patient's convalescence far quicker; but even where dropsy has fully developed itself, with albuminuria, no remedy acts quicker, and with more certainty than Hepar, 3."

In pulmonary catarrh and in pleurisy which does not soon clear up, Hepar does good work. In these cases we find long coughing spells, with sticking pains, the cough being prolonged, loose, with rattling, and at times paroxysmal in character.

In acute catarrh of the larynx, bronchi and lungs, the following pictures as drawn by Hering give us a good idea when Hepar is needed: "Tickling and roughness in larynx, and hoarseness or aphonia; also acute catarrh of lungs with scratching, tickling sensation in air tubes, pressure and heaviness under sternum, and frequent dry, tearing cough; rough, whistling respiratory sounds, indicating a dry condition of mucus membrane, such inflammations are usually of long duration; constant oppression of the chest and irritation to cough, which becomes worse by long continued and fatiguing coughing, finally gasping for breath and expectorating very little sputa, worse from breathing cool air.

In stomach and bowel troubles Hepar is useful, but the time allotted me to-day will not permit me to treat of these conditions.

In glandular swellings, in enlargements and in induration of submaxillary, sublingual and parotid glands, in swellings of the tonsils, cervical, axillary, mammary and mesenteric glands; in its action on the liver, kidneys and inguinal glands, Hepar is useful, as Dr. Morrison will tell you in his paper, "The Analogues of Hepar in Skin and Glandular Affections." In the early stage Hepar will abort and sometimes cure scirrhous tumors in the mammæ.

In abscess of the prostate gland and of the labia, Hepar is good, but Mercurius will frequently bring them to the suppurating point quicker. In herpes preputialis sometimes mistaken for soft chancre, Hepar will cure the whole trouble.

Hering recommends Hepar when there is constant offensive exhalations from the body, resembling Psorinum in this respect. According to Macfarlan, the Psorinum patient's body has a filthy smell, despite frequent washings. Silicea has offensive smell from the feet. Hepar children smell sour.

In skin troubles, Hepar is worth its weight in gold. When the slightest scratch on the hands, or abrasion of the skin suppurates, Hepar is the remedy to think of. Nash says Petrolerum has this symptom also, but Petroleum suits those cases of unhealthy or suppurating skin which are hard to heal, and have become chronic. Hepar does its work quickly. If it is going to cure the trouble, it will do it in from three days to a week.

In the treatment of pruritis, when the case is aggravated by cold air, or when the patient gets worse when the room gets cold, when it continues the whole night disturbing greatly the sleep, Hepar is said to be the remedy by Kafka. In my experience, Hepar relieves those cases when the patient's trouble is aggravated from the heat of the bed, or from being in a warm room; in this respect resembling Mercurius.

In chronic cases of skin disease where the suppression of the eruption has been followed by mania or melancholia the administration of Hepar has brought back the rash or eruption, and removed the mental disorder.

In conclusion, it is my experience that in the whole *Materia Medica* there is no remedy that will cure so many cases of so-called hives as Hepar in the high potencies. When the breaking out is on the sternum, with intolerable burning between the breasts, on the upper arms, on the back of the neck, at the roots of the hair, along the belt line, and on the hips, Hepar is the remedy par excellence.

In stubborn cases of varicose nature, when the limbs swell enormously, and the itching is intense, Rhus will reduce the swelling, and Hepar will drive away the distressing itching so often felt under the knees, along the calves, down to the ankle.

ANALOGUES OF HEPAR SULPHUR IN SKIN AND GLAND AFFECTIONS.

BY CALDWELL MORRISON, M. D., NEWARK, N. J.

(Read before the New Jersey State Homœopathic Med. Society, Atlantic City, October, 1905.)

CALCIUM sulphide, or hepar sulphur having such a wide range of action, naturally has many analogues in its effects on the skin and glands. No attempt will be made, in this paper, to refer to all of them. I will simply call your attention to a few

of the more prominent related remedies, rather by way of refreshing your memory than of attempting to offer anything new or extraordinary.

I. *Skin*.—Taking up first the remedies closely allied to hepar in its action on the skin, the closest analogue is naturally sulphur itself. Both remedies cover a very wide range of skin troubles, as both have pronounced skin symptoms in their pathogenesis. Indeed sulphur is *the skin remedy*, “par excellence,” while hepar sulphur, because of the sulphur it contains, does not fall far short of it. Both drugs produce skin eruptions of various sorts, and both are indicated in a wide variety of cutaneous diseases. Sulphur is more multiform in this respect than hepar, almost every variety of skin affection being caused by it and so calling for its use therapeutically, from the simple erythema to the most pronounced vesicular and pustular lesions.

But while they are alike in these and many other respects, there are marked differences in their action which readily differentiate them. The great difference and one that runs all through the pathogenesis is that in hepar sulphur there is a constant *tendency to suppuration*. Sulphur, too, may have this, but not nearly so marked. In sulphur there is *more itching*; in hepar more destruction of tissue. Many sulphur eruptions are dry in character. Most all hepar eruptions are moist and oozing. In sulphur the action of the drug seems to be expended more on the outer layers of the skin; in hepar on the deeper layers and cellular tissues as well, involving also the allied structures and tending always to suppuration and destruction of tissue. In sulphur the eruption is more apt to be *vesicular*; in hepar *pustular*. In sulphur the *itching* and *burning* predominate; in hepar the *oozing* and *discharge*. Sulphur covers almost any stage of skin eruption, but is especially indicated in the early acute stages, or at the very last; while hepar is more commonly indicated in the secondary and “ripe” stages. These great differences will readily serve to differentiate the two remedies, similar as they are in many ways.

Calcaria.—Coming to the other chemical element in hepar, there is little analogy, strange to say, between calcaria and calcium sulphide so far as their action on the *skin* is concerned. The value and action of hepar in skin troubles seems to be due entirely to the *sulphur* in its composition, not at all to

the lime. In the pathogenesis of calcarea there are almost no marked effects on the skin. Indeed, we rarely think of it in purely cutaneous affections, unassociated with involvement of the glands; and even then constitutional symptoms decide for the drug rather than local ones. So while we may use calcarea in skin diseases of various types, even with the characteristic suppurative features of hepar, it will be constitutional symptoms that will guide us to the choice. Even then the chances would probably favor sulphur.

Silicia.—Very similar to hepar both in its pathogenesis and symptomatology is silicia. Both drugs tend strongly to pustulation and suppuration. In both the skin is apt to be unhealthy, breaking down easily, and healing slowly. The chief difference between the drugs is in the acuteness and depth of their action. Hepar meets rather the frankly *acute* suppurative process, as *e. g.*, in boils and suppurating processes associated with inflammation and fever. Silicia is called for rather in less acute suppurative processes, in chronic, sluggish suppuration, especially if associated with disease of the deeper tissues, tendons and bones. Silicia is slower in its action and meets a slower process. It is a deep acting remedy and meets suppurative processes of the deeper tissues. Like hepar, the skin is apt to crack and fissure; but it is even slower to heal than in the former remedy. The process in silicia is very sluggish, tending to become chronic. Silicia follows hepar well, but rarely if ever should it be given before hepar. Strangely enough, while silicia follows hepar well, their action seems to be somewhat antidotal, and so the two remedies do not act well together. At least this is so stated in the books. Clinically, I have not found it to be the case.

Mercury.—Another analogue of hepar in skin affections, and very similar in its action to both hepar and silicia, is mercurius. Like both these remedies mercurius, in its action on the skin, tends to pustulation and suppuration. But there is *less pus* than with hepar, but more tendency to *ulceration*. Like both sulphur and hepar the skin eruptions of mercurius are aggravated at night. There is less *inflammatory* action with mercurius than with hepar, but more *ultimate destruction* of tissue. The typical skin lesions of mercurius are rather of the *syphilitic* type—sluggish, ulcerative, painless, not profuse in discharge—rather than the inflammatory painful type

of lesion, like boils, with profuse suppurative discharge, so characteristic of hepar.

Like silicia, on the other hand, mercurius profoundly affects the *deeper tissues* of the skin and even the bones. It is a deeper acting remedy than hepar and is generally indicated in the later stages of diseases where hepar may have been called for earlier. In this respect, too, it is like silicia. There is apt to be more pain in the mercurius type of ulceration than those of silicia, but more tendency to fissure and sinus in the latter.

Graphites.—Another analogue of hepar in skin affections is graphites. Like hepar it is called for in cutaneous diseases characterized by profuse discharge. But in hepar the discharge is *thick, creamy pus*; in graphites a *thick, gluey, tenacious* fluid, or a thin, watery, sticky fluid, accompanied by tendency to cracks and fissures in the affected skin. The process is less inflammatory than under hepar, but more sluggish as in silicia. Like silicia it is often indicated in old sluggish ulcers, but here, too, the characteristic of the discharge and the tendency of the skin to crack will differentiate.

Sometimes there is a thick pustular discharge with graphites, as *e. g.*, in seborrhœic eczema in children, but even here it is differentiated from hepar by the cracking of the skin and the glutinous nature of the discharge, even though pus. Here it is to be compared with *mezereum*, which has profuse pustular discharge, like hepar, but covered by thick, hard scabs, and less tendency to bleed than with hepar. Mezereum, by the way, like mercurius, affects the deeper tissues, even bones, its action resembling the syphilitic poison. Like mercury, too, there is a nightly aggravation of symptoms.

Rhus tox.—Another close analogue of hepar and sulphur is rhus tox. Like sulphur it is a great *itching* remedy, this symptom characterizing almost all its cutaneous lesions. Like hepar it has a great tendency to *vesiculation* and *pustulation*. Thus it stands midway between the two, and closely related to both. With sulphur there is apt to be more burning and less oozing than with rhus, though both have great itching, apt to be worse at night. While both rhus and hepar have profuse discharge, with the latter it is characteristically thick, creamy pus, while with the former it is a less bland, more irritating, offensive, ex-coriating pus. Rhus is the deeper acting remedy, and meets a more malignant type of trouble. There is apt to be more

pain, more bleeding, more excoriation, and more involvement of the deeper tissues than with hepar. The characteristic type of rhus skin eruption is seen in vesicular erysipelas, that of hepar in the ordinary furuncle. The inflammation of rhus is much more malignant than that of hepar. Then, too, with rhus the well known constitutional symptoms—its restlessness, prostration, and aggravation from damp weather—will serve to distinguish between the two drugs.

Arsenic.—This reminds us of arsenicum album, which is a closer analogue of rhus and sulphur than of hepar. Like rhus and sulphur there is apt to be a good deal of itching with arsenicum skin lesions, though not nearly so much as with the two former remedies. *Arsenicum* is more like sulphur in that the lesions are apt to be *dry* and accompanied by *burning*. Unlike rhus its skin lesions are rarely vesicular or pustular. With arsenicum the process is less inflammatory than rhus or hepar. It meets *chronic* cutaneous diseases especially with constitutional symptoms—prostration, restlessness, irritability, etc.—in this respect like rhus, but differing greatly in the *character* of the lesions. *Psoriasis* is the type of arsenicum skin lesion.

Attention is merely called, in passing, to antimonium tartaricum which like hepar produces a *pustular* eruption, characterized, as distinguished from hepar, by less pus, less inflammation and more vesicles, which turn into pustules and leave in turn more pronounced scars than hepar pustules. The eruption of antimonium tartaricum is very similar to the lesion of small-pox, in this respect being like croton tig.

Petroleum, like hepar, produces skin lesions which tend to ulceration and suppuration, with unhealthy sensitive skin, but with tendency to crack and fissure (Graph.), less discharge than hepar, a more chronic process, and more excoriation of the surrounding skin. It is a remedy less frequently used in skin diseases than its value would suggest.

II. *Glands.*—I can only call your attention very briefly to the analogues of hepar sulphur in gland affections. These are calcarea, silicia, merc., iodine, rhus, baryta, lycopodium and phytolacca.

As the sulphur in hepar relates it to skin affections and remedies, so the calcium in it relates it to affections of glands and remedies acting on glands. Some find calcarea and its salts analogues here. The great distinguishing feature of hepar, differentiating it from all these analogues in affections of the

glands, is the same *tendency to suppuration* that we found running all through the pathogenesis of the drug. So calcarea, while it is a great *gland* remedy and very frequently indicated in glandular diseases, is rarely called for in suppurative conditions, where hepar is especially indicated. Calcarea is called for rather in comparatively painless, non-inflammatory, hard swellings of glands, especially the submaxillary and cervical lymphatic, particularly if associated with the lymphatic constitution. These swollen glands show little tendency to acute inflammatory processes and even less tendency to suppuration. In this respect calcarea is very like lycopodium. With the latter remedy, however, there is apt to be associated indigestion with much flatulency, or else hepatic congestion with constipation.

A much closer analogue of hepar in glandular affections, as in skin troubles, is silicia. The tendency to suppuration is quite pronounced, as in hepar, but the process is less acute and inflammatory, more sluggish in its course and symptoms, with a discharge less creamy than hepar, and more sanious and irritating, tending to chronicity and involvement of deeper structures. Here as in skin troubles, silicia follows hepar well.

The same may be said of mercury, which is another close analogue of hepar in these conditions. There is less tendency to suppuration than with hepar, but more tendency to *ulceration* and deposition of new products. As with silicia, so with mercurius the process is apt to be sluggish. Thus mercurius, like silicia follows hepar well, but rarely precedes it in treating glandular troubles. With reference to pain mercurius occupies a position midway between these two remedies, having less acute pain than hepar but more than silicia. With mercury, too, there is apt to be the nightly aggravation so characteristic of this remedy in all complaints.

This reminds us of rhus tox., which bears some resemblance to hepar in glandular affections. There is swelling and enlargement of the lymphatic glands, with rhus, not much tendency to suppuration, as with hepar, but more serous infiltration of surrounding tissues. There is apt to be associated, also, more or less rheumatic stiffness and aching of neighboring parts, or else involvement of the skin, with tendency to vesicular eruption. Involvement of the glands, in connection with eruptive or other fevers often calls for rhus. Here constitutional symptoms will help to a right decision.

Another remedy often called for in glandular affections, though not very closely related to hepar is iodine. This remedy resembles calcarea rather than hepar in its action on glands, there being little tendency to suppuration, but rather *induration* and loss of function. Iodine has a specific effect on certain glands, especially the thyroid, the mammal, ovaries, and testicles, as well as the lymphatics. *Swelling* and *induration* are the two key notes of the drug in glandular affections; and with these is apt to be associated local and general emaciation so characteristic of the drug. In some cases the glands are so affected as to produce loss of function and even atrophy, while on the other hand, notably in case of the thyroid, there is cellular hypertrophy, the gland assuming the aspect of a morbid growth. Iodine is the sheet anchor in the treatment of goitre.

Baryta, like calcarea and iodine produces enlargement and induration of the glands; but its chief sphere of action is in affections of the lymphatics of the throat and neck, especially the tonsils and submaxillary glands. Tendency to chronic induration, and in the case of the tonsils to repeated suppuration, is here the key note of the drug. Baryta is one of our best drugs in that painful affection, quinsy, it often times removing the tendency to recurrent inflammation and suppuration.

In closing I would merely call your attention to phytolacca, which acts markedly on the glandular system, particularly on the glands of the neck and on the mammæ. Here the tendency is to ulceration and suppuration, preceded by painful induration. With phytolacca there is very apt to be a rheumatic involvement, with stiffness and aching in the muscles of the neck or limbs, and perhaps painful pharyngitis. Phytolacca is one of our best remedies for inflammation of the mammary glands, often, if used in time, aborting an attack of mastitis. In these cases it precedes hepar, silicia, or mercurius, and often renders the use of the latter remedies unnecessary.

In this paper I have made no attempt to present anything novel, but have sought rather to recall to your minds the great key notes of the drugs referred to, with their distinguishing characteristics. If I have been successful in this attempt and have made good Homœopathic prescribing any easier for those who have so kindly given me their attention, I will feel abundantly repaid.

**ANGINA PECTORIS AND TOBACCO-HEART; A CONTRIBUTION TO THE
STATISTICS OF THE EFFICACY OF HOMŒOPATHIC GLONOINE IN
EMERGENCIES.**

BY H. OTTO SOMMER, M. D., WASHINGTON, D. C.

IN making this brief contribution to the statistics of angina pectoris we do not pretend to bring anything new or to indulge in any theories or speculations as to cause of angina pectoris, but merely to record the description of a case as it occurred in my own practice in Washington about four years ago, giving the manifestations of the case, and its treatment, thus giving another item for the Index Catalogue of the subject so that those who have more time to devote to a review of the literature in general will have more facts from which to draw conclusions.

History.—Late one evening I was hastily sent for to attend a gentleman whom I had never seen before and of whose medical history I was in ignorance. When I arrived in his room I found him lying conscious upon his back, pupils rather contracted, or small, breath bad, tongue coated yellowish, pulse a little weak, and a history of “one of his weak spells,” and “indigestion.” Prescribed *Nux. vom.* in drop doses in a glass of water (*Osler*), and went home. Next report was that the patient had spent a good night, having fallen to sleep shortly after I left.

Later.—Had a conversation with the nearest responsible male relative at my office, and elicited a history of excessive, regular tobacco smoking, repeated attacks of “heart spells,” with repeated attacks of slight “frothing at the mouth,” coincidental with, or at least usually coincidental with the heart spells, and other data—for example the use of bromides—which led me to infer attacks of an epileptoid nature. I was never given a chance to see the patient during one of the alleged epileptic attacks in order to be able to give an authentic description of the attacks, or to determine whether they were truly epileptic, or merely epileptoid in nature, or otherwise make a reasonably accurate diagnosis.

Treatment.—After the first night I was called, and had prescribed *Nux.*, as previously stated, I had a consultation at my office with the nearest responsible male relative from whom I endeavored to obtain some more comprehensive history of the

case. I obtained nothing definite, or satisfactory save the fact that it had always been looked upon as some form of "tobacco heart," that the patient was subject to these faint spells, had frequently had them, and recovered spontaneously. I tried, but did not succeed in impressing on the relative the possibility of a sudden fatal attack before I or some other physician might be reached. Nor did I succeed in getting him to take the *Nux. vom.*, 20 minims, three times a day which I suggested, nor *plantago major* which I prescribed against the tobacco habit, and with which I have had some success in other cases. Nor did I succeed in breaking the "bromide habit" to which he was an ardent adherer under the influence of some "sun-down (?) doctor" employed as a clerk in the War Department. The prognosis made was serious.

Report of the acute condition which occurred some months later.

One night between eleven and twelve o'clock, I was awakened by violent ringing of my door-bell by the nearest responsible male relative aforementioned. In order to have another physician along called out of the window to get Dr. B——, who was my near neighbor, while I hurried into my clothes.

After a rapid walk, and run of about one mile arrived at my patient's house, when a hasty glance revealed Dr. B—— "ethically (?) " waiting for me in the parlor. I hurried up the stairs and found a man over fifty years of age, unconscious, pale, with cold sweat, etc.—in short in a "*state of collapse*," and *absolutely* pulseless. Feeling that I was in surroundings where neglecting to use a hypodermic might compromise me I endeavored to attach my needle to hypodermic syringe and give 1-100th of a grain of nitroglycerine hypodermically; experiencing some difficulty in adjusting my needle, I reached for my homœopathic medicine case, extracted a vial of gionoine 3x, and dropped a *drop—no more* of this upon the tongue of my patient; immediately the pulse, which was absent until this and which had been reported as absent for some time before I entered the room, returned, sufficiently to give us time to think and examine the patient, whose consciousness had now returned.

Examination of Patient.—Pulse was now holding its own, and we were able to examine the patient objectively more satisfactorily, and by conversation obtain additional description of his symptoms.

Precordium: Sharp pain in the region of the heart, radiating indefinitely into the left arm, neuralgic in character.

Shoulders: Left shoulder, and arm were very much swollen, distinctly red in appearance, very painful, and the pain very much worse on touch, or motion, in fact agonizingly so; in short, a picture of highly inflammatory muscular rheumatism.

Treatment.—Patient was bolstered up in a semi-sitting posture, and a hypodermic of morphium sulphate, $\frac{1}{4}$ grain, given directly into the deltoid muscle to lessen the pain.

Suffice it to say my patient spent a restful night, and was in fairly good shape the next day, during which I kept him on bryonia 3x, on rather general indications, such as the rheumatic ones, the general bilious look, brown coated tongue, constipation, etc.

He improved somewhat rheumatically, and as regards his bowels had a rather satisfactory passage.

However, during the next day or two he had repeated "sinking spells," as his family call them, which were of such a decided character that as I could not persuade the family to call in a trained nurse, necessitated my remaining with him, and during at least one of which I found him in such rapid and repeated attacks of collapse that I was compelled in sheer desperation to administer nitroglycerine hypodermically in 1-100 grain doses sometimes three and four times in a forenoon, the recovery upon administration of each "hypo" being immediate and decided.

During * the next week or so he was kept steadily on teaspoon doses of infusion of digitalis, given on pulse and urinary indications, and pushed to the limit of its permissibility as evidenced by the *bluish* shade which the usually comparatively white ocular sclerotics assumed.

During this period—during which he held his own with beautiful equanimity, having noticed no attacks of syncope, etc., but having noticed that his urine, which under the digitalis was increasing nicely in quantity, was filled with rose-colored amorphous urates, so that the chamber looked like a bucket of paint—I instituted a general elimination, and anti-rheumatic treatment. This consisted of artificial Karlsbad salt given in this case more especially on its hepatic indica-

*From this time on had a trained nurse in attendance.

tions, as evidenced by the patient's chronically sallow skin, dyspeptic history, immediate constipation, etc., and the resultant evacuations verified my conclusions. Having in the meantime obtained a history of bilious, and malarial derangement following, and incident to government service in Cuba, I interpolated such drinks as *orangeade*, *lemonade*, etc. Further, I supplemented my eliminative treatment by abundant inhibitions of lithia water with interpolations of salicylos whenever more acute symptoms of neuralgic pain in the shoulder, arm, or back arose. Although this was a heart case I noticed no depressant effects from the salicylos, the patient being well supported by the digitalis throughout, and the salicylos maintaining its reputation for innocuousness in this critical case at least.

The whole period during which the patient was confined to bed, or home, occupied about two weeks, after which I was discharged, and no physician employed until I saw the patient again at my office, to which he came without assistance, but with his left arm still somewhat stiff in the shoulder and incapacitated. The patient was of optimistic nature, and returned to his work and used no further treatment except the "nature cure," consisting of gradual passive then active movements for his arm, finally using the rowing cure.

Electricity was not used at all.

He also would, and did go back to his favorite bromides.

Of course I left instructions to have amyl nitrate capsules constantly within reach, and also instructed his friends in the use of, and to have handy a hypodermic with nitro-glycerine. In case of another acute attack I referred patient to the nearest office, that of the late Surgeon General Smart, pending my arrival.

Urinalysis.—While I made a urinalysis in detail in this case I did not keep my notes, and must under this head remark that the *patient's breath* was distinctly *uræmic* during the acme of his condition. He also stated that his father was "posted," and that his kidneys were "all rotten."

In addition to the previously mentioned history of excessive use of tobacco, and addiction to bromides, I was later informed by an intimate friend of the patient's that he was an *habitual* whiskey drinker in *small* but very *regular* quantities.

Race: Scotch-Irish American.

Whilst we did interpolate cactus grand. during the con-

valescence, when the vise-like cramp pain of the heart became prominent, and at other times camphor when it seemed indicated, our main reliance was placed in nitro-glycerine and digitalis, and it was under the administration only of the drugs given that decided benefit was observed.

Discussion.—We had thus a case of true angina pectoris with very evidently a complicated ætiology, and evident complications, for the degree of the pain, and other symptoms were too severe to question the genuineness of attack, but can hardly be judged without having seen the patient in an attack.

However, the previous history being given us by laymen is anything but distinct, or satisfactory as he never was known to have an attack of the severity witnessed by us. To the history of a complicating epilepsy we were later able to add some substantiation in addition to the frothing of mouth by vague (medically speaking) descriptions of spasms of a tonic character of arms and legs.

Compared with Osler's tabulation we have the following:

OSLER'S TRUE ANGINA.	PRESENT CASE.	PSEUDO-ANGINA.
Most common between ages of 40 and 50 years.	Over 50.	At every age, even 6 years.
Most common in men.	Man.	Most common in women.
Attacks rarely periodical, or nocturnal.	Variably periodical and nocturnal.	Often periodical and nocturnal.
Not associated with other symptoms.	Associated with complications.	Associated with nervous symptoms.
Lesions: Sclerosis of coronary artery.	Lesions:— According to Loomis the response in my case to nitro-glycerine argues against coronary sclerosis. The nicotine poisoning, however, argues for some "physiological-toxic" disturbance of cardio-plexus.	Lesions:— Neuralgia of nerves and cardio-plexus.
Prognosis grave and often fatal.	Prognosis probably fatal if neglect by lack of patient's co-operation continues.	Never fatal.
Arterial medication.	Symptomatic medication: Arterial and antineuralgic, dietetic, hygienic, etc., according to conditions.	Antineuralgic medication.

OSLER'S TRUE ANGINA.
(Continued.)

Vaso-motor form rare.

Agonizing pain, and sensation of compression by a vise.

Pain of short duration.

Attitude:—

Silence and immobility.

PRESENT CASE.
(Continued.)

Vaso-motor features present to some extent.

Agonizing pain and sensation of compression by a vise.

Pain sometimes lasted one or more hours.

Silence and immobility during some attacks. Agitation and activity in others.

PSEUDO-ANGINA.
(Continued.)

Vaso-motor form common. Pain less severe; sensation of distention.

Pain lasts one or two hours. Agitation and activity.

Addenda and Deductions.—As some will no doubt find fault with my unlimited use of nitro-glycerine (I stated the minimum used) I refer to Loomis who mentions 1-50 of a grain as a minimum dose in pathological conditions; further “even in large and repeated doses Loomis has seen no ill-effects; it is a perfectly sane drug.” I prefer, however, to leave it in a tumbler of water in homœopathic form when I leave it with a patient. With a hypodermic near by as a monument to innocuous desuetude. In contradiction of Loomis, however, it is sometimes of use in “arterio-sclerosis where the arteries are more or less changed.” It is our best and quickest *empiric* heart tonic.

It is said to increase the quantity of urine in chronic Bright's and I have observed this to some extent though Loomis claims he did not in his run of cases.

That my case presents features according to Osler's standard of both true angina pectoris and false (pseudo) angina pectoris, is clear: due perhaps to the complications, perhaps, Osler's standard is fallacious, or superficial just as much of his *Echinococcus* work was vague and superficial, or has he, like all who have attempted it, found it difficult to reduce medicine to a fixed pedantic rule.

NOTES ON MATERIA MEDICA.

BY MALCOLM E. DOUGLASS, BALTIMORE, M. D.

CAFFEINE.

Physiological Action.—Caffeine acts upon the reflex centers of the spinal cord. It increases the temperature at first, afterwards diminishing it. It stimulates the cerebral functions, causing rapidity and facility of mental action. It produces nervousness and wakefulness. It has no true tonic effect. It raises the blood pressure and increases the pulse rate, acting as a direct stimulant to the muscle of the heart. It increases the solids in the urine by stimulating the epithelium of the tubules.

It actively stimulates the respiratory centers. This influence is required where there has been marked depression of the nervous system, and where motor depressants have been taken as poisons. It is given in conjunction with morphine to prevent any after depressing effect of this agent on the heart's action. It is given in many cases of headache the effervescent citrate being a popular remedy, one used by the laity almost indiscriminately.

Therapeutic Action.—Its pathogenetic power of causing excessive reflex excitability accounts for the virtues of coffea, even in high potencies, in the nervous erethism of children and women, and shows that it may homœopathically prevent the accession of *tetanoid spasms* during intestinal irritation, or even the irritation of dentition.

It has been found curative in *cardialgia*, *spasmodic asthma*, *hemicrania*, and *nervous palpitations*.

It is used in *sleeplessness*; nervous agitation after excessive pleasureable emotions; nervousness in teething children, and in women suffering from uterine diseases. One of the pathogenetic symptoms of caffeine is "*flushing of the face*."

Caffeine is a direct *heart stimulant*. It is given to support the heart in extreme feebleness or threatened failure. It is given in conjunction with remedies that are apt to have a depressing effect upon the heart, to sustain it against such depression. In *feeble heart* from dilatation, valvular insufficiency or fatty degeneration, and in *dropsy* resulting from the above conditions, with deficient capillary tonus, this agent is an excellent remedy.

In *exhaustion* from prostrating disease, with weak heart, this agent will exercise a positive influence in the general restoration of the patient, through its strengthening action on the heart.

It is given in some cases of *asthma* where there is exhaustion from feebleness of the respiratory nerves.

It is given to dispel the *drowsiness* common to some individuals after eating a hearty meal. It is a remedy for *melancholia*, hypochondriasis and despondency.

It is a valuable remedy in general *lithæmic* conditions, as it assists in the elimination of urea and uric acid.

It is important in *uremic coma*, which causes depression of the heart and respiratory functions.

Caffeine Citratis Effervescens.—This popular combination for the administration of caffeine is made by triturating together 154 grains each of caffeine and citric acid, 11½ ounces of bicarbonate of soda, 10½ ounces of tartaric acid and 12 ounces of sugar, finely powdered. After thorough trituration, alcohol is added in sufficient quantity to make a soft paste. It is rubbed through a No. 6 galvanized iron sieve, and when dried is reduced to a coarse powder. It contains one per cent of caffeine. It is kept in a cool, dry place, in well-stoppered bottles and is given in teaspoonful doses dissolved in a glass of water. It is a most pleasant method of administration. It is more commonly prescribed in the treatment of *headaches*, especially if caused by an acid condition of the stomach.

In mild cases of *palpitation* of the *heart* of a functional character, usually depending upon gastric derangement, this agent will be found advantageous.

CALABAR BEAN.

Active Ingredients.—The efficient element of calabar bean is the alkaloid called eserine or physostigmine. It is present only in the cotyledons of the seeds.

Physiological Action.—The most curious and characteristic action of calabar bean is one that renders it of extensively useful application in ophthalmic medicine and surgery; this is contraction of the pupil and of the ciliary muscle. It induces a condition of short-sightedness, and occasions sympathetic dilatation of the pupil of the other eye. The best method is to use a solution of the extract in glycerine, the latter in no way

interfering with its operation. The proportion is $2\frac{1}{2}$ grs. of extract to 100 minims of pure glycerine:

Calabar bean has, however, much wider actions on the body than have yet been mentioned. Perhaps the best summary that has been given of the action of the calabar bean on the heart and spinal nervous system is that of Roeber: "1. The chief action of the bean consists of a depression and final annihilation of the excitability of the ganglionic elements of the spinal cord; and its operation especially affects the groups of cells in the anterior horns of the gray matter which conduct impulses from the brain to the periphery, and then also attacks the elements of the gray matter in the posterior horns which transmit sensations of pain to the brain. 2. By this functional lesion of the gray matter a complete loss of the motor and reflex activity of the spinal cord is produced, likewise a loss of sensibility to pain; while the sense of touch, and the so-called muscular sense, are retained till the death of the animal. 3. Besides this action on the cord, calabar bean possesses a special power over the movements of the heart, which in small doses it merely retards, but in large doses completely arrests. 4. The interference with respiration, which is especially produced by small doses, is either the consequence of a sudden interference with the heart's action, or is produced by a destruction of the motor power of the respiratory muscles from paralysis of the spinal cord. 5. The poison increases the secretion of tears and of saliva. 6. The increase of defecation is the result of a tetanus of the stomach and intestines, the cause of which is not yet fully determined. 7. The motor and sensory nerves are not affected at the commencement or in the development of the affections of the cord; at a later stage there follows a paralysis or hastened death of the intra-muscular termini of these nerves. 8. The fibrillary muscular twitchings occurring soon after the administration of the poison, which are especially striking in mammalia, may be explained by a local irritation of them, caused by paralysis of the motor nerve-termini. 9. The pupils are strongly contracted both in the external and in the internal use in large doses of calabar bean extract; but as to the cause of this it will be necessary to institute more exact inquiries.

But the most interesting properties are those, perhaps, which place physostigma in opposition to atropia. The fatal effects

of a lethal dose of physostigma are neutralized by the employment of atropia (under certain conditions of administration), the atropia so influencing certain structures as to prevent the occurrence in them of the modifications induced by physostigma, which, if not so dealt with, would result in death. The action of physostigma is cancelled by that of atropia, and so decided is the antagonism that so large a quantity even as $3\frac{1}{2}$ times the minimum lethal dose of the physostigma is rendered inoperative. Dr. Fraser's own experiments disclose facts of a very singular character. For instance, when the two substances (physostigma and atropia) are administered simultaneously, they induce certain actions of intensity sufficient to cause death; whereas, if the administration of the physostigma be delayed for twenty-five minutes after that of the atropia, those actions cease to be fatal ones. To delay the administration of the physostigma for only five minutes, or, with the same respective doses, for only ten minutes, is still insufficient to ward off death; recovery from the influence of the atropia takes place only at a minimum of fifteen to twenty minutes. The counteracting effect of atropia in regard to the lethal action of physostigma, is successfully exerted, moreover, only within a definite range of doses, determinable by experiment.

Therapeutic Action.—The earliest, and still the most frequent, use of calabar bean, is in eye affections, as already described. But it has been used, with more or less success, in various nervous affections.

The agent is useful where there is torpor, inactivity, atonicity of the intestinal canal, and of the organs of digestion and appropriation, or where from lack of nerve force there is deficient secretion, dryness of the mucous membranes, deficient glandular secretions with dry and hardened feces.

It increases the contractility of the muscles of the bladder walls, and of the uterus.

The agent may be given internally to allay the tension induced by extreme nervous irritation. Convulsive disorders from irritation are allayed by it, but it is not in general use for this purpose.

Its chief influence is upon the eye. When *mydriasis* has been induced by atropine or other agent, a solution of the sulphate of eserine will quickly restore the normal condition. Any *adhesions* of the *iris* which may have occurred as the

result of inflammation may be broken up by this agent. It is used to reduce intraocular tension, as has been stated, and to increase the power of the muscles of accommodation, being valuable in paralysis of these muscles.

It is useful in *conjunctival inflammations* where *perforating ulcer* threatens to permit prolapse of the iris. It is especially advised when *ulceration* without determination of blood—indolent in character, nonvascularized—is present. It is useful in *intermittent strabismus*, in *glaucoma*, *asthenopia*, in *photophobia* and in some cases of neuralgia of the eyeball.

Sandy feeling. Smarting. Lids feel granulated, and edges have a scalded feeling as if raw, the same next day, with sandy sensation in lids.

In the head symptoms we find: Pain extending from vertex to occiput, with pain in temples, obliging him to lie down, with pain over orbits, cannot bear to raise eyelids.

In the throat we find a feeling as if a ball ascended.

We find this agent useful in irregular menstruation, with palpitation, congestion of the eyes, with occasional tonic spasms, rigidity of every muscle, but without loss of consciousness, sighing respiration.

Spasmodic action of the heart, with feeling of pulsation through the whole body, especially in the chest, the beats of the heart distinctly perceptible in the chest and head.

COLD AFFUSION IN DELIRIUM TREMENS.—Sir William Broadbent, in *British Medical Journal*, calls attention to a valuable means of treating the delirium of acute alcoholism which has not generally found its way into our text-books, although it has been much used in hospital practice. The patient is stripped naked and lies upon a blanket over a waterproof sheet. A large bath sponge, dripping with iced water, is dashed violently on the face, neck, chest and body as rapidly as possible. He is then rubbed dry with a rough towel and the process is repeated a second and third time. The patient is now turned and the wetted sponge is dashed on the back of the head and down the whole length of the spine two or three times, vigorous friction with the bath towel being employed between the cold water attacks. Albuminuria and a complicating pneumonia offered no contra-indications for this treatment, and the patient wakes up with all tremor gone, with a warm, dry skin, and with the weak, flickering pulse quite toned up.—*Hom. World*.

EDITORIAL.

THE DOINGS OF A SMALL MIND.

OF late years, there has been evidence of increasing liberality and tolerance on the part of both the leaders and the rank and file of the old school. The American Medical Association has liberalized its code; its members are no longer disciplined for consulting with homœopaths; at its meetings are read papers which quote without hesitation the results of observations made by homœopathic surgeons. It is, therefore, with sincere regret that we feel obliged to direct public attention to a piece of narrow-mindedness in the management of the *Journal* of the Association; narrow-mindedness so useless, so utterly without object or advantage, that he to whose attention the matter is called must experience sensations of nausea, to think there is a man capable of such smallness.

We refer to the present methods of the Obituary Editor of the Journal.

For a number of years it was the custom of this department to record the deaths of all medical men, stating, among other things, the colleges from which they graduated and their years of graduation. Some time back, this policy was changed. Now we note that when the death of a homœopath is chronicled, his college is disguised, thus a graduate of Hahnemann, of Philadelphia, is recorded as "Pennsylvania" or "Philadelphia."

To present specifications in support of our accusation, let us quote from the obituary columns of the *Journal* for October 14, 1905:

"Charles I. Roseberry, M. D., Department of Medicine of the University of Pennsylvania, 1860; for several years a member of the Easton (Pa.) board of health; surgeon in the army during the Civil War;" etc.

All of which is correct; but the fact that Dr. Roseberry also graduated from the New York Homœopathic College is not stated.

"Geo. Edwin Ricker, M. D., Pennsylvania, 1878, city physician of Minneapolis in 1903, died suddenly at his office in that city, Sept. 23, from heart disease, aged 51."

Dr. Ricker graduated from the Hahnemann Medical College, of Philadelphia, in 1878. He was professor of Clinical Medicine in the Homœopathic Department of the Minnesota University. He also held other positions of honor in homœopathic circles.

"Benjamin Bowman, M. D., New York, 1865, died at his home in Chambersburgh, Pa., Sept. 20, after an illness of several months, aged 68."

Dr. Bowman was a graduate of the New York Homœopathic College, 1865.

"Jno. C. Russ, M. D., Cincinnati, 1882, died at his home in Circleville, Ohio, from rheumatism, Sept. 18, aged 53."

Dr. Russ was an Eclectic physician, a graduate of the Eclectic College.

"T. Edward Perkins, M. D., Pennsylvania, 1895, died at his home in Philadelphia, September 16, aged 38."

Dr. Perkins graduated from the Hahnemann Medical College, of Philadelphia, 1895.

"Gladys Colt Puckett, M. D., Missouri, 1903, died at her home in Kansas City, Mo., Sept. 16, aged 26."

Dr. Puckett graduated from the Hahnemann Medical College of Kansas City, in 1903.

Similar examples can be quoted from preceding numbers of the *Journal* with surprising frequency.

Does not the fair-minded man stand aghast at the thought of such a humiliating infinitesimal specimen of manliness? Is there any hope for the unification of the profession with such a man as the "Obituary Editor" in any official position?

Truly we may say of him as the Rev. Robt. Hall said of a member of his congregation: "He has a soul so small that it could be put in a nut-shell; and moreover, if there was a maggot hole in the shell, it would drop out."

BEHRING'S REMEDY FOR TUBERCULOSIS.

At the recent session of the Tuberculosis Congress in Paris, Professor v. Behring, the discoverer of the antitoxin of diphtheria, announced that he has discovered an effective remedy for the cure of tuberculosis. The method is based upon the impregnation of the living cells of the organism with a virus derived from the yellow tubercle. The substance is said to be in the form of a powder. Judging from the press reports, it would appear that Behring has only described his method of preparation in outline.

It is stated that the new remedy will not be on the market until next August, and that its composition and method of preparation will be kept secret. It is difficult to believe that a man of Behring's reputation and attainments would condescend to methods closely bordering on charlatanism. This is not the first time Behring has carried out such a policy. In 1898 he secured a patent on the antitoxin of diphtheria in the United States and made every effort to prevent the sale or use of any but the patented Behring antitoxin. In this attempt he was unsuccessful, and was severely criticised both in this country and abroad for his mercenary spirit.

This fact of course has nothing to do with the efficiency or uselessness of his proposed remedy for tuberculosis. An announcement of this kind coming from an investigator of Behring's reputation, deserves serious consideration. The general feeling which prevails among experts on tuberculosis is that it is too early to express any positive opinion as to the value of the new treatment, but considerable doubt is expressed by those who heard Behring's paper that he will be able to substantiate his claim of having discovered a specific cure for tuberculosis.

THE RELATIVE PREVALENCE OF TYPHOID FEVER IN RURAL AND IN URBAN DISTRICTS.

We have no doubt but that if the average physician were asked whether there were more deaths per thousand from typhoid fever in cities or in the country he would at once reply "in the cities." The great number of deaths from this malady reported every week in our large cities—and especially in Phil-

adelphia—naturally leads us to the opinion that the greater portion of typhoid fever cases occur in urban communities.

A review of the United States Census Report on Vital Statistics reveals the astonishing fact that this is not the case, and that the relative proportion of deaths from typhoid fever is much greater in rural than in urban communities. Dr. Seneca Egbert, who has made a critical study of these statistics, states that "the data thus graphically presented unmistakably demonstrated that the disease in question, common as it is in many of our cities, is a far more serious scourge to the rural population, which embraces two-thirds of the total population of the entire United States."

The Report on Vital Statistics shows that the death rate from typhoid fever is lowest in the sections extending northward from Virginia and westward as far as Iowa. It will be observed that this division contains by far the largest percentage of urban population, including as it does the cities of Baltimore, Philadelphia, New York, Boston, Pittsburg and Chicago. The highest death rate is found to be in the South and Southwest, where the population is essentially rural. The death rate in these sections is almost three times as great as in the group of states first referred to. It should be stated that in compiling these statistics only towns having a population of eight thousand or more were classified as "cities."

In endeavoring to account for the greater prevalence of typhoid fever in rural districts there are several facts to be considered. Large communities, it may be asserted, spend more money and more care in obtaining a pure water supply than do small villages or hamlets. While there are numerous instances of extensive epidemics resulting from the pollution of large public water supplies, nevertheless these do not offer the constant danger of infection that results from the use of shallow wells supplied by surface water. The custom of placing the cesspool, the barn yard and the well in close proximity prevails generally in country districts and in small towns. As long as such an unsanitary state of affairs is commonly adhered to, so long will typhoid fever claim its annual quota of victims.

The sad feature which must appeal to every physician, as he reads the list of deaths from this widespread disease, is the knowledge of the fact that by intelligent care all of these lives could have been saved. Modern investigators have demon-

strated most positively that typhoid fever is an *absolutely preventable disease*. It is a sad comment on the intelligence and activity of either a rural or urban community that this disease should be permitted to go on unchecked year after year. In the case of many diseases, such as cancer or pneumonia, we are able to do little or nothing, at the present time, to prevent their spread, on account of our lack of knowledge of their cause or means of transmission. These excuses do not hold good, however, in regard to typhoid fever, as the cause of the disease and the manner in which it is transmitted have been repeatedly demonstrated.

If the death rate from typhoid fever is to be curtailed it is necessary that physicians shall urge upon their patients and upon the community, the importance of observing sanitary laws. The public should be instructed as to the causation and method of dissemination of typhoid fever. All excretions from a typhoid fever patient should be disinfected, not only during the disease, but for several weeks after recovery. The medical profession should urge that the water supplied to our cities should be purified and protected from all sources of contamination. In rural communities where surface water is used, every precaution should be taken to prevent contamination of the wells from cesspools or sewers.

These facts are so self-evident and have been brought to the attention of physicians so many times that it may seem almost trite to mention them. The frequency with which they are neglected, however, and the disastrous results following such neglect, furnish sufficient reason for insisting that a strict adherence to sanitary principles is the only safe and sure preventive of typhoid fever.

THE EXPOSURE OF PATENT MEDICINE FRAUDS BY THE LAY PRESS.

DURING the past year there have been several laudable attempts on the part of certain magazines to bring before the public the true facts regarding the manufacture and sale of "patent medicines." Considerable success has attended these efforts and the public has at last begun to realize the character and extent of this "Great American Fraud."

The medical press could do but little in the way of educating the laity in such a matter, first, because medical magazines

are not read by the general public, and second, because many individuals were of the opinion that the opposition of physicians to secret nostrums arose from selfish motives and from fears of competition.

It is now dawning on the mind of the long deluded public that the constant and unwise use of patent medicines is one of the most prolific sources of chronic and long lasting disorders, not to mention the drug habits induced by them. The number of people suffering from lumbar myalgia who daily consume considerable quantities of irritating diuretics in the form of kidney cures is indeed legion. We recall upon one occasion, while visiting a gentleman in one of our Southern States, being shown a long array of bottles on a shelf in the kitchen. These, he told us, were patent medicines which were used constantly by the four negroes employed on his farm. Everyone of these strong, healthy negroes who performed hard physical work all day, took daily their doses of "consumption cure" or "specific for Bright's disease." A considerable portion of their earnings, we were informed, was expended in this way.

While it is true that the poor and the ignorant constitute the greater proportion of the users of patent medicines, nevertheless thousands of intelligent and educated people are numbered among their dupes.

One of the most notable of the recent attempts to expose the secret nostrum fraud, is the series of articles by Samuel Hopkins Adams now appearing in *Collier's Weekly*. The facts which Mr. Adams presents are the results of long and thorough investigation and there is every reason to believe them correct. Physicians would do well to read these articles and to disseminate the facts they contain.

Mr. Adams first lays emphasis on the fact that the basis of the whole secret nostrum business is "fraud, exploited by the skillfullest of advertising bunco men." As to the testimonials so freely offered to the public he says, "the ignorant drug-taker, returning to health from some disease which he has overcome by the natural resistant powers of his body, dips his pen in gratitude and writes his testimonial. The man who dies in spite of the patent medicine—or perhaps because of it—doesn't bear witness to what it did for him. We see recorded only the favorable results: the unfavorable lie silent. So while many of the printed testimonials are genuine enough,

they represent not the average evidence, but the most glowing opinions which the nostrum vender can obtain, and generally are *the expression of a low order of intelligence.*"

An amusing example of the sources of these testimonials is found in the case of the "three distinguished temperance workers" who advocated the use of a well known brand of whiskey. Mr. Adams took the trouble to trace up the histories of these gentlemen and they make interesting reading. In the case of one of these three, it is noted that he received no money for the testimonial but was paid ten dollars "to have his picture taken."

The manner in which the manufacturers of patent medicines secure the co-operation of the newspapers in fighting legislation unfavorable to their interests, is illustrated by what is called the "red clause." This is a clause printed in red letters on every advertising contract providing "that the contract should become void in the event of hostile legislation." Thus the newspapers are compelled to fight the battle of the nostrum maker in order to save their business interests.

Mr. Adams announces that it is his intention to take up in detail the more prominent secret nostrums and describe their composition, their dangers and the deceptive methods used to exploit them to the public. Of course there will always be people who will continue to use patent medicines—especially those containing a generous quantity of whiskey—however clear the danger and fraud connected with their use may be exposed. At the same time literature of this character will do much to provoke public sentiment against the deceptive products of quackery and will enable those who have been innocently deceived in the past to avoid such frauds in the future.

MUSCLE TRANSFERENCE.

BRADFORD, in a recent issue of the *Boston Medical and Surgical Journal*, reports several cases of the successful transference of fibres of a normal muscle to the tendons of a paralyzed muscle, in order to restore motion to the parts acted upon by the paralyzed muscle. One of the cases cited was that of a boy whose left deltoid muscle had been paralyzed for several years, and the entire left arm had undergone atrophy. A portion of the trapezius was detached from its insertion on the scapula and inserted into the fibrous fascia of the deltoid. The

arm was then placed in a plaster of Paris cast for six weeks. Three years later the arm had nearly gained its normal function. Other cases reported were the insertion of the sartorius into the patella, and transference of half of the tendo Achillis to the inner side of one foot and to the outer side of the opposite foot.

This new procedure opens up a wide field for surgical work. No doubt many physicians have among their patients, cases having permanent paralysis of certain muscles and which have always been looked upon as being incurable. It would seem that we now have at our disposal a procedure which, in selected cases, at least, is capable of greatly improving the function of the paralyzed part. The risk of such an operation is practically *nil* and where conditions are at all favorable the patient should be given the advantage of this procedure before he is given up as beyond all hope of improvement.

SOME LETTERS ANENT THE VALUE OF SUCCUS CINERARIA MARITIMA IN CATARACT.—In *Homœopathic Recorder* for September 15th, may be found some interesting correspondence relating to the efficacy of this remedy in cataract. It has become generally well known that this remedy is useless or worse than useless, still some physicians are yet trying it upon their patients. We have given it a fair trial long since, and can add our testimony to its uselessness in cataract. Its trial is a waste of time and money, as far as our own experiences go.

THE MEDICAL TREATMENT OF ENURESIS.—Martha C. Burritt, M. D., in *North American Journal of Homœopathy*, has written an excellent article upon this topic. The author concludes that of all the remedies mentioned in our books for those cases of enuresis showing the high colored, loaded urine, Benzoic acid, Lycopodium and Sulphur, have given the best results. When enuresis is due to the reflex irritation of worms in the bowels, Cina or Santonine are called for. In cases where incontinence is due solely to an untrustworthy sphincter and enuresis occurs with every sudden spasmodic movement, such as coughing or sneezing, Causticum seems truly homœopathic.

If Causticum fails to relieve such a case, it is probable that the neurotic condition is not limited to the vesical sphincter and a remedy such as Gelsemium, Phosphorus, Conium or Arsenicum should be selected to better cover the general lack of nervous and muscular resistance.

Belladonna is the remedy indicated for the effects of a sudden chill. The writer has succeeded best in enuresis, with Sulphur, Sepia, Lycopodium and Causticum.

GLEANINGS.

TUBERCULOSIS OF THE SKIN.—C. White makes the following division:

(1). The true tuberculosis in which bacilli can always be found and animal experimentation always successful as lupus vulgaris, scrofuloderma, tubercular gumma, ulcers, lymphangitis; cutaneous miliary tuberculosis, tuberculosis verucosa cutis, and verruca neurogenica.

(2). Tuberculosis, in which bacilli are absent, but inoculations may often give positive results and the pathologic condition is suggestive of tuberculosis and with evidences of the disease in other parts of the body. It includes lichen scrofulosum, erythema induration, folliculis aenis, acne scrofulosum and scarlatiniform eruptions in the course of acute pulmonary tuberculosis.

(3). Diseases found in those with a tuberculous diathesis and includes eczema scrofulosorum, pityriasis nutrum.—*Boston Medical and Surgical Journal*, September 14, 1905.

WILLIAM F. BAKER, A. M., M. D.

HOT AIR TREATMENT OF ACUTELY INFLAMED JOINTS.—Thomson. This comparatively new and novel treatment will prove of value in acute articular rheumatism. It is to be considered an improvement on the old time remedy of flannel and cotton. In acute cases its action is rapid and certain. The best effects, however, are seen when it is applied early in the course of the disease, preferably within the first week. Given then a case early and in a few treatments of hot air, there will be a decided amelioration and cure will result.

The technique. The limb is placed in oven with the heat as high as the patient can stand and allowed to remain 1 hour. During this treatment the patient is allowed to sip slowly a full glass of water. This promotes free sweating. The limb is then taken out and warm alcohol or spirits of camphor is applied with gentle friction and limb carefully dried. Following the treatment the limb should be allowed to remain absolutely at rest until the next one.

Usually 3 treatments are sufficient for acute cases and from 15 to 20 for most chronic ones.—*New York Medical Journal*, Sept. 9, 1905.

WILLIAM F. BAKER, A. M., M. D.

DIGITALIS IN THE TREATMENT OF VALVULAR DISEASE OF THE HEART.—Gept. In a review of this interesting subject the writer points out some very well known facts worthy of consideration and repetition. It is the general consensus of opinion concerning this drug that in it we have a most valuable adjuvant and also with it much harm may be done.

Its action primarily is on the pneumo-gastric nerve, nerve endings and fibres of heart muscle, the ultimate end being to lengthen the time for

ventricular dilatation, and increasing the amount of work done by heart, but while it increases the force of ventricular contraction, it raises arterial tension.

The effect of digitalis is to enable the heart to do the greatest amount of work and to give it the longest possible interval of rest. The ultimate effect is to produce hypertrophy, thus contra-acting loss of compensation. The important determination, however, is to divide the strength of cardiac muscle and its relation to the amount of work imposed on it.

Three contra-indications should be firmly implanted in our minds, viz.:

- (a) Hypertrophy with established compensation.
- (b) High arterial tension.
- (c) Degenerated myocardium principally "fatty degeneration."

Dujarden-Beaumetz gives the following rule: "When in a patient digitalis given methodically and managed with care, produces no amelioration on the part of the heart and pulse; when above all the quantity of urine is not augmented, be persuaded there is a fatty degeneration of the heart and immediately cease the employment of the drug."

The so-called cumulative action of the drug is best explained by Wood in the following: "When digitalis is administered persistently, its first evident influence may suddenly develop after long delay. It is said the first symptoms sometimes of this cumulative action are syncope, vomiting, delirium and paraplegia."

In conclusion it may be said that digitalis still ranks as one of the best heart stimulants. A most suggestive statement made by the writer is "While but little has been added to our knowledge of the drug during recent years, we have probably learned to apply it with more accuracy to the conditions in which it proves of most value."

This latter suggestion speaks strongly to the general practitioner as a check on the indiscriminate use of digitalis for "*all heart irregularities*." It should also gainsay many adherents who persist in the use of this remedy to ambulant cases. To our mind perhaps no class of cases is so banefully influenced as those cardiac ones who are allowed to be on their feet at the same time the circulation is influenced by this powerful heart tonic.—*American Medicine*, September 23, 1903.

WILLIAM F. BAKER, A. M., M. D.

PATHOLOGY OF GENERAL PARALYSES OF THE INSANE.—O'Brien. While the view of most neurologists concerning the syphilitic origin of the disease has never been proved, yet the mass of facts argue strongly in this direction. The fact that many cases exist where there seems to have been no possibility of infection has no other than a negative impression on the argument.

The writer advances the idea that we are dealing with an active bacterial toxemia. The hypothesis is advanced that there is a chronic toxic infection from the respiratory and alimentary tracts, permitted by the general and local impairment of the defensive mechanism leading to the excessive growth of bacteria, but especially upon the more abundant growth and prominence of a diphtheroid bacillus, which gives the disease its distinctive characteristic paralyses.

With the development of syphilis there is an extra supply of leucocytes

and the myelocyte and bone marrow are exhausted in their attempt to produce new leucocytes. Under such circumstances the intestinal juices being diluted, saprophyte and other bacteria assume a pathogenetic action. This condition the writer feels must exist before general paralysis can ensue.

Dr. Robertson has isolated a bacillus resembling Klets Loeffler and which undoubtedly exists as pathogenic effect.—*American Medicine*, September 21, 1905.

WILLIAM F. BAKER, A. M., M. D.

LIGATURE OF THE INNOMINATE ARTERY.—Sheen reports a case of aneurism of the innominate artery which he successfully treated by ligation, and reviews the subject thoroughly, giving abstracts of reported cases. The author made a median incision extending from the cricoid cartilage to one inch below the sternal notch. He then exposed and freed the carotid and innominate arteries and carried a double floss silk ligature around the innominate distally and tied it with Balance's stay knot. Pulsation ceased, but reappeared later. A similar operation again failing, he performed a third operation through a five-inch transverse incision above the clavicle, ligating the artery twice proximally. This last operation was followed by an uneventful recovery.

Ligature of the innominate artery has only been performed successfully 7 times in 36 operations, or a mortality of 78%. Of the fatal cases 24 were due to sepsis and hæmorrhage combined; 3 to sepsis alone; 3 to cerebral lesions; 1 to acute pericarditis; 1 to pus kidney and 1 to bronchopneumonia. Only one case recovered in preantiseptic days.

The author draws the following conclusions: 1. In properly selected cases the operation is reasonably safe; 2, suitable cases are those of the globular and circumscribed variety; 3, the maintenance of asepsis is the chief factor for success; 4, the incision should be central with horizontal and vertical division of the manubrium, if necessary; 5, the carotid should also be tied; 6, the ligature should be silk; 7, some injury of the internal coat is probably necessary to insure occlusion; 10, cerebral lesions stand next to sepsis as cause of death; 11, "Valsalvan" methods prior to operation are inadvisable.—*Annals of Surgery*, July, 1905.

J. D. ELLIOTT, M. D.

FRACTURE OF THE SPINE.—Burrell gives a summary of all the cases of fracture of the spine which have been treated at the Boston City Hospital since 1864, or 244 cases in all. These cases are divided into three series according to the method of treatment, i. e., 82 cases treated expectantly from 1864-1887; 114 cases treated by immediate rectification of the deformity and fixation of the spine by a plaster-of-Paris jacket between 1887-1900; and 48 cases treated by open operation since 1900.

The mortality in all of these cases was 171 or 64.5%. Of the 73 recoveries, 47 or 64.2% were useful. The author draws the following conclusions:

(1) That fractures of the spine may well be divided into two classes: first, fractures of the spine with injury to the cord, and, second, fractures of the spine without injury to the cord.

(2) That it is not best to decide what the treatment of an individual case of fracture of the spine should be from the statistics, because the lesion varies so widely.

(3) That in many cases of fracture of the spine it is impossible to primarily state whether the cord is crushed or pressed upon by bone, blood, or exudate, except by an open operation.

(4) That only by the persistence of total loss of reflexes, complete insensibility to touch and pain, and motor paralysis below the level of the lesion, can total transverse destruction of the cord be diagnosticated.

(5) That if pressure on the cord is allowed to remain many hours, irreparable damage to the cord may take place.

(6) That unless it is perfectly clear that the cord is irremediably damaged, an open operation to establish the condition of the cord and to relieve pressure is imperative as soon as surgical shock has been recovered from.

(7) That in certain cases of fracture of the spine, when the cord is not injured, but is liable to injury from the displacements of the fragments of a vertebra, rectification of the deformity and fixation of the spine may be used.

(8) That if the cord is crushed, no matter what treatment is adopted, there will, of necessity, be a high rate of mortality.—*Annals of Surgery*. Oct., 1905.

J. D. ELLIOTT, M. D.

RADICAL TREATMENT OF CANCER OF RECTUM.—Hartwell has collected and tabulated the reports of 46 cases of radical operation of cancer of the rectum and has been able to trace all of these cases, except two, until death or the present time.

The results are: Died from operation 12, or 26% (7 dying from infection or 58% of the deaths). 5 or 11% died from recurrence in less than 2 years and more than 1 year, 4 or 9% died of recurrence in less than 3 years and more than 2 years, and as 2 cases in this period are suffering from extensive recurrence with extreme cachexia, the probable per cent. of the recurrent deaths in this period is 13 per cent. Alive at more than 3 years, 5 cases; alive at less than 3 years but more than 2 years, 1 case; alive at less than 2 years but more than 1 year, 1 case; alive at less than 1 year, 8 cases. Estimating that 2, or 1-5 of these cases will reach the limit, we have 7 cases out of 44 or 16% of estimated cures.

The author thinks these results unsatisfactory and believes that three principles are necessary to make cancer of the rectum more curable:

(1) Earlier diagnosis. The average diagnosis in the cases studied was made in the ninth month of the disease. Therefore every patient suffering from disease of the lower bowel should be thoroughly examined. First, with the finger and, if that is negative, with instruments (proctoscope, etc.).

(2) Prevention of sepsis by the contamination of the wound by fæces. For this purpose an inguinal colostomy, one which will deflect the whole faecal current, should be performed three weeks prior to the radical operation. This colostomy is also of advantage in giving knowledge of the amount of involvement of the cancer, and the distal end of the gut can be made cleaner and there is usually a general improvement in the patient's condition.

(3) Complete removal of the lower end of the rectum and all the lymphatic glands which are involved. The lymphatics which drain the rectum are divided into four groups: (1) The anal skin; (2) the intermediate anal; (3) the columnar anal; (4) the group draining the rectum proper. Group (1) drains both outward toward the thigh and inguinal glands and upward into group (3). The other three groups all drain upwards, following in general the course of the superior mesenteric artery until they finally all drain into the glands in the hollow of the sacrum. As the lowest glands have an anastomatic circulation with the sacral glands, the latter must be removed in cancer low down.

As a substitute for the destroyed sphincters the author prefers an inguinal colostomy, as he thinks it gives better functional control and because, as explained before, this preliminary operation helps to greatly reduce the mortality in the radical operation. He describes the technique of colostomy and the radical operation.—*Annals of Surgery*, Sept., 1905.

J. D. ELLIOTT, M. D.

TUBERCULAR CONDITIONS OF THE SPINE.—DeForest Willard describes the following methods of treatment for the relief of spinal caries, stating the indications for, and contra-indications against, and the technique of each form: 1. Laminectomy for Paraplegia; 2. Forcible immediate straightening of the kyphosis; 3. Forcible gradual straightening of the kyphosis; 4. Erasion of the carious bone; 5. Wiring of the spinous processes; 6. Evacuation of pus accumulations. His conclusions are:

1. Complete methodical and long-continued fixation of the spine in the position of hyper-extension, with healthy surroundings in the sunlight, are the prime factors in securing new ossific deposit necessary to replace the carious bone.

2. Laminectomy for paraplegia is advisable only after long-continued and patient treatment along the above-named lines from one to two years, since the prognosis, especially in children, under these conditions is favorable, and good powers of locomotion may be confidently expected. The operation is justifiable in selected cases where loss of motion and sensation are progressively worse, and the symptoms threaten life. If the tubercular masses within the spine can be removed, and if the extra dural pachymeningitic deposits or pus can be taken away, improvement may be expected, and in many cases relief occurs. The operation has a mortality of about 25 per cent. from immediate shock, 36 per cent. within a month; while one-half of the cases die within the year, their lives being probably shortened by the operative procedure. Cases of non-improvement and death equal nearly 65 per cent.

3. Forcible immediate straightening of the kyphosis is an unsurgical and dangerous proceeding; it is liable to reawaken the tubercular disease and weaken the column.

4. Forcible gradual straightening by supporting the kyphotic upon a pedestal is a valuable agent in relieving deformity. The weight of the shoulders and pelvis can thus be utilized as straightening forces and the weight of the column thrown upon the posterior arches. In this position it is permanently fixed by plaster-of-Paris.

5. Complete erasion of the carious bodies of the vertebræ is an uncer-

tain operation; in the dorsal region requiring section of the ribs, with danger of wounding the pleura.

6. Wiring of the spinous processes has never been sufficiently tried to demonstrate its helpfulness.

7. Spinal abscesses which contain only liquifaction of caseation should be aspirated. When true pus has formed, aseptic thorough drainage is advisable.—*Annals of Surgery*, Oct., 1905. J. D. ELLIOTT, M. D.

X-RAY IN MALIGNANT DISEASE.—Coley discusses the value of the X-Ray in treating malignant disease after an experience of three years during which time he observed 176 cases. These consisted of 68 cases of sarcoma; 36 cases of carcinoma of the breast, including nearly every variety; 44 cases of epithelioma of the neck, head, face and tongue; 14 cases of deep seated abdominal growths, probably carcinoma; 5 unclassified; 3 cases of tuberculous glands of the neck; 3 cases of Hodgkin's disease, and 3 cases of lupus. In 5 cases of sarcoma the growth completely disappeared but recurred in all of them within a few months. Two of the recurrent growths afterward disappeared under combined X-Ray and toxin treatment, and the patients are well at present.

In only one case of carcinoma of the breast did the growth disappear and the diagnosis in this case was doubtful. In four cases of epithelioma the tumor entirely disappeared, but there was no improvement and little, if any regarding the growth of the tumor when the glands are involved.

One patient suffering with Hodgkin's disease improved rapidly at first, but later died suddenly. Unfortunately no autopsy was performed. In two of the patients suffering from lupus, the disease completely disappeared and some improvement was noted in the other. In one case of tubercular glands of the neck, the enlarged glands disappeared and in another case the size was decreased. Reports from other observers agree with this.

Some now advise the X-Ray as a pre-operative measure, the reason given being that the field of operation is thus cleared.

The fallacy of such reason is twofold: (1) It presupposes that the agent is curative, and (2) it takes for granted that no harm can come to the patient by reason of delay. Both of the arguments are pernicious.—*Annals of Surgery*, August, 1905. J. D. ELLIOTT, M. D.

GLAUCOMA AND SCLEROTOMY.—The operation is carried out after the method of de Wecker. The pupil is contracted as much as is possible by Eserin. A broad von Graefe knife is entered just in front of the iris-angle (the enlarged vessels of Schlemm's canal giving the point), carried across the chamber, and a corresponding counter puncture is made. This should be carried out in such a way that about one-third of the corneal border is included. With slight to-and-fro movements the aqueous is allowed to escape. Then follows still further contraction of the pupil, and this guarantees that with the further widening of the incision there is little probability of the iris becoming incarcerated.

With this to-and-fro movement both incisions are widened to about 3 m.m. and then the knife is withdrawn. In this withdrawal the point is turned up and a groove is cut along the inner surface of the sclera at the

into corneal angle. During this procedure the point of the knife should bite deeply into the sclera that it should shimmer through the conjunctiva (without, however, button-holing it).

Dianaux regards this as the best provision for continuing filtration; but when one considers how strong the tendency of such incisions is to naturally drop into exact apposition, the certainty of a permanent filtration layer remaining, is not very great. Sooner or later an impervious condition is again produced and the result becomes only transitory. For this reason he considers the main reliance must be placed upon the after treatment; by massage and miotics. Even as early as 12 hours after the operation massage of the eye is commenced. The wound margins are made to gape a bit, and the anterior chamber is emptied under the conjunctiva. This is repeated at 12 hours intervals up to the fourth and fifth day, according to the ease with which the wound may be opened.

Along with this is employed a mixture of eserín, pilocarpin and cocain, to which of late adrenaline has been added. After a week the patient is discharged with instructions to use the miotic mixture; and (if intelligent) to carry out the massage at least twice a day.

With such treatment not only do many patients retain what vision they possessed, but in some cases after several months there is even an improvement in vision and in the visual field.—Dr. Dianaux, Nantes, *Annals d'Oculist*.

WILLIAM SPENCER, M. D.

CORNEAL ULCER FROM STREPTOTHRIX.—To further confirm his previous statement that the common ulcer of the cornea is frequently due to the special form of streptothrix isolated by Prof. De Giaksa, the author reports two cases which he has examined bacteriologically and microscopically. The infection of the cornea had been produced in both instances by a trauma, and while one had been complicated with hypopyon, in the other panophthalmitis had followed, requiring evisceration of the bulb. Cultures were made and colonies of bacteria developed, which inoculated in the cornea of rabbits, produced characteristic ulcers with hypopyon. This special form of streptothrix, studied in the Institute of Hygiene of the Royal University of Naples, according to the researches of Sanfelice and Bellisaris, is greatly diffused in nature, as in dust, many cereals and on the ground, and consequently many corneal ulcers observed in the clinics are considered the product of this micro-organism.—Dr. De Berardinis, *Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

TRANSPLANTATION OF RABBIT'S EYE TO IMPROVE PROTHESIS.—The author reports the final results of his operations of transplanting the eyeball of the rabbit into the human capsule of Tenon. He detailed eight observations of subjects operated upon for periods of 4½, 3, 2 and 1 year. He concludes from the results that the transplantation gives definite and durable results. The eye loses about half, sometimes two-thirds of its volume; but it rests in the capsule of Tenon as a small stump that is perfectly mobile and extremely useful for carrying the artificial eye. For the operation to give the best results, he insists upon the necessity of following carefully the details

of his technique, which he gives in detail. These may be summed up as follows:

1. There must be perfect cessation of hemorrhage or oozing in the capsule of Tenon before the introduction of the eye.
2. Place the cornea of the eyeball transplanted looking backward.
3. Bring forward the four muscles, previously marked, and suture them two and two (without twisting), the external rectus with the internal, and the superior with the inferior.
4. Do not select a rabbit's eye that is very large, in order that there should not be any distention of the capsule.
5. Over the thickenings caused by the muscle pads put in a conjunctival suture uniting the separated edges.

He regards this plan of preparing for prothesis as that which gives the very best stump. Notwithstanding the partial absorption there remains sufficient to improve the prothesis. If, however, the prothesis still appears insufficient, notwithstanding the stump, this is due to the ocular shells not being adequately adapted. It is the important point that the artificial parts be adjusted most perfectly.—Dr. Lagrange, Bordeaux, *Annals of Ophthalmal.*

WILLIAM SPENCER, M. D.

OSMIUM METALLICUM.—The eye symptoms of this drug are valuable and interesting, since it has cured glaucoma. They are: Candle light surrounded by a yellow circle; by a rainbow-hued circle; by a green circle with red margin, larger or smaller, according to the distance; by a bluish-green circle with ashy-gray margin, becoming larger as the light is removed; by bluish-green circle, the outer margin of which is bright red; if the light is ten or fifteen paces from eyes the flame seems enveloped by dust or smoke. Glaucoma, with iridescent vision and severe pain around the eyes. Osmium is a valuable remedy in violent supraorbital and infraorbital neuralgia, with lachrymation.—*The Homœopath Eye, Ear and Th. Journal.*

WILLIAM SPENCER, M. D.

CONTRIBUTION TO THE PATHOLOGICAL ANATOMY OF CORNEAL ULCER WITH HYPOPYON.—The case reported by the authors was one of absolute glaucoma, to which ulcer of the cornea with hypopyon had supervened, and on this account it resembles those already published by other writers. The eye had been completely lost and was enucleated to relieve the patient from the excruciating pains from which he had been suffering. The bacteriological and microscopical examination revealed that the pathogenic micro-organism was the pneumococcus, which was found under the floor of the corneal ulcer and not in the pus of the anterior chamber, that the descemet membrane was intact, the endothelium of the same altered and the iris and ciliary body infiltrated with leucocytes.

The germs having entered through the corneal lesion elaborate toxins, which exercise a certain influence on the blood vessels of the iris and ciliary body, by which the white blood corpuscles migrate into the iris, the anterior chamber and cornea surrounding the ulcer. By different authors groups of leucocytes attached on the inner surface of the cornea in correspondence with the ulcer have been found, a fact which is due, according

to Colombo and Ricchi, to the same influence of the toxins on the white corpuscles. This case further confirms the statement of the majority of the writers on the subject that the pus in the anterior chamber is not derived from the cornea, but from the iris. The authors conclude that the most rational treatment of the affection is the one successfully experimented by Caldacaro with the specific antipneumococci serum.—Drs. G. Colombo and G. Ricchi, *Annals of Ophthalmal*.

WILLIAM SPENCER, M. D.

DECAPSULATION OF THE KIDNEYS FOR NEPHRITIS IN A CHILD TWENTY-SIX MONTHS OLD.—Dr. Edwin E. Graham reports the case of a child twenty-six months old that developed a post-scarlatinal nephritis with pronounced anasarca. The anasarca disappeared temporarily but returned in a most stubborn, uncontrollable form. The nephritis dated back to the eighteenth month. After unsuccessful efforts to relieve the condition by the use of hot baths, diuretics and purgatives, the operation of renal decapsulation was decided upon as the child's condition grew rapidly worse. The operation was performed under chloroform anaesthesia and the child stood it remarkably well. Improvement was prompt and progressive. A small piece of the kidney was removed and the pathologist's report designated it as "acute diffuse nephritis."

The form of nephritis most benefited by operation is the acute and sub-acute cases, but only those should be operated upon which are not doing well under appropriate medical treatment, the result in chronic cases is not favorable. Regeneration of the kidney tissue in the child is more likely to occur, and the kidney lesions in the child are less likely to be complicated by other degeneration in other portions of the body and hence improvement possible in the first few months following decapsulation is more apt to be permanent in the child.

Dr. Graham collected 11 cases of Bright's disease in children that had been operated. He expresses surprise at the scarcity of this operation in children as everything points to the fact that better results might be anticipated in children than in adults.—*Archives of Pediatrics*, Sept., 1905.

C. SIGMUND RAUE, M. D.

A CASE OF INFECTIVE (MALIGNANT) ENDOCARDITIS IN A BOY TEN YEARS OLD: RECOVERY.—The patient was a boy 10 years old, reported by Dr. Chas. F. Judson. The result of the affection was marked by fever of sudden onset with chilly sensations; headache; vomiting, pain in the knees. A papulo-mascular rash appeared on the hands and spread over the body. This was followed by polyarthrits. The fever persisted, running an irregular course, later becoming septic in type. A systolic apical murmur was present and later cardiac dilatation developed. The murmur increased in harshness and enlargement of the spleen and albuminurea developed. Leucocytosis was marked and a blood culture demonstrated the presence of a diplococcus in pure culture. The haemoglobin fell to 21 per cent. and the red cells to 1,745,000. Prostration and adynamia were extreme, general oedema setting in.

The diagnosis was based upon the septic type of fever; the marked *anemia*; the skin lesions; enlargement of the spleen and the presence of

the diplococcus in the blood. Intravenous injections of collargol were given, but did not appear to influence the course of the disease.—*Archives of Pediatrics*, Sept., 1905.

C. SIGMUND RAUE, M. D.

RUPTURE OF THE UTERUS.—Valenta (Laibach) reports two cases due to transverse position of the fetus for which version was attempted and failed, and refers to twelve other cases which came under his observation. In both cases reported the ruptured uterus was amputated, with extra peritoneal treatment of the stump, and both recovered. The writer finds that the sooner the patient is operated after the accident, the more favorable is the result; whereas the cases compelled to make a long journey before reaching the hospital, had a lethal ending. From his experience he advises supra-vaginal amputation with extra peritoneal treatment of the stump, as the quickest and safest method of operating.—*Zentralbl. f. Gyn.* 1905, 263.

THEODORE J. GRAMM, M. D.

PARAVAGINAL OR ABDOMINAL OPERATION IN CARCINOMA OF THE UTERUS.—Gellhorn (St. Louis) has made an extensive examination of published series of cases of cancer of uterus in connection with the question of recurrence after operation. There are certain factors at work here with which we are not familiar; as for instance, indurated glands are not always cancerous, and small glands often contain cancer nodules. Under exceptional conditions, cancer of the uterus may exist even for many years without giving rise to glandular metastases. On the other hand, extensive metastases have been observed in the incipient stages of cancer. Such instances are rather exceptional, and it may safely be assumed that glandular involvement takes place only in the more advanced stages of the disease. As to recurrence after vaginal hysterectomy it is a well known fact, that in about three-fourths of all cases, they become evident in or near the scar in the vagina. From data furnished we may say that cervical cancer affects the pelvic glands only in less than one-third of all cases, and that the invasion practically does not take place until the parametria are infiltrated. The next deduction is that two-thirds of all cases do not require the removal of the glands incident to the radical operation. It is and will be an illusion to pursue the cancerous invasion throughout the pelvis. It is not even possible to extirpate all carcinomatous or even suspicious glands. No matter how careful we are we are bound to leave some of the glands or some of the lymph channels behind. It has been shown that even the most extensive operations have in many instances failed to prevent recurrences. Some of the conclusions reached are that in only about one-third of the cases which generally are considered operable, are the pelvic glands involved. To indiscriminately remove them in every case would mean to subject the remaining two-thirds to an unnecessary operation. Yet we possess at present no positive method to distinguish cases with affected glands from those with normal glands. The ablation of glands is fraught with danger which increases proportionately to the extent of their removal. This danger finds expression in the high mortality and the frequent disturbances of convalescence. The extirpation of glands is almost always incomplete. When carcinomatous glands are removed,

other equally involved glands are almost certain to be left behind, both from anatomical and technical reasons. Because of this, the remote results of the extirpation of glands have thus far failed to come up to the expectations raised. Consequently the systematic search for and routine ablation of the pelvic glands in carcinoma of the cervix uteri should be abandoned. With the parametrium the circumstances are somewhat different. In nearly every case of adenocarcinoma of the cervix observed at Johns Hopkins Hospital the disease had extended to the broad ligament. We must conclude that in the majority of cases of cervical cancer recurrences can only be prevented if in operating we give the cervix the widest possible berth. But this is impossible if we employ either the simple abdominal hysterectomy or the simple vaginal extirpation, methods no longer justified in cancer of the cervix. We must look for methods which enable us to widely excise the parametria. For this purpose the author advocates the operation devised by Schuchardt, which consists in an extensive excision of the vagina and parametria together with the uterus.—*Amer. Jr. Obs.* Vol. LII, page 1.

THEODORE J. GRAMM, M. D.

TUBERCULOSIS AND PREGNANCY.—Malsbary summarizes our knowledge of the influence exerted by tuberculosis and pregnancy upon each other. It is pointed out that tuberculosis is usually at first a pure infection by the tubercle bacillus. Later the disease is a true phthisis, a multiple infection, in which a pulmonary sepsis is superimposed upon a tuberculosis. The occurrence of secondary infection increases the virulence of the toxins and in every way makes the condition of the patient worse. Many writers have reported that tuberculosis is especially liable to occur during pregnancy. It is possible that this may be only apparent, the disease being more frequently aroused from a latent state by pregnancy, or first recognized at this time. The seclusion of patients at the time of pregnancy may place them under conditions that predispose to tuberculosis especially through close association with tuberculous patients. The practice of pregnant women going into retirement should not be tolerated, if such seclusion predisposes to infection through unhygienic surroundings or association with tuberculous patients. It is advisable to recommend suitable exercise in the open air and sunlight. The gravity of tuberculosis is increased by pregnancy especially during the puerperium. The highest maternal mortality has been observed in primipara. Hemoptysis does not occur with especial frequency at the time of parturition. Superalimentation, so valuable in tuberculosis, may be detrimental during pregnancy through the strain imposed upon the kidneys. Interruption of pregnancy is a serious matter, and usually is not beneficial so far as pulmonary tuberculosis is concerned. But tuberculosis is not a contraindication to this operation when required for other reasons. Tuberculosis seems to increase the sexual appetite and to actually predispose to pregnancy. Tuberculous women should not nurse children. A child may be infected by association with a tuberculous mother.

In the course of the article the author refers to some investigations which are important in the highest degree as showing how tuberculous

matter may be disseminated. In the spread of tuberculosis, the common house fly apparently plays an important part. The evident craving of flies for tuberculous sputum is a matter of common observation. F. T. Lord found that after the ingestion of tuberculous sputum by flies tubercle bacilli are excreted within eighteen hours, which remain virulent for at least fifteen days. Furthermore the bacilli actually multiply in the intestinal canal, apparently without otherwise affecting the fly, so that these pests act as veritable incubators. It seems needless to add that tuberculous patients and infected sputum should be protected from flies; and as a matter of esthetics and hygiene, these insects should be kept away from food stuffs.—*Amer. Jr. Obs.* Vol. LII, 28.

THEODORE J. GRAMM, M. D.

THE USE AND ABUSE OF THE UTERINE CURETTE.—McReynolds (Philadelphia) gives a history of this instrument, and recounts the diverse views formerly entertained concerning its utility. From a review of 170 cases of curettement, he has found that endometritis hyperplastica chronica or polyposa (Olshausen), subinvolution of the uterus, puerperal conditions of the endometrium caused by the retention in utero of some of the products of conception, yield promptly as a rule, to a thorough and careful curettement of the uterus, unless there is already present disease of the adnexa, or a general septic infection. He does not find it necessary to leave a packing in the uterus for from two to five days, but only for twelve hours. One paragraph in his article deserves the closest attention. He says: "A great many of these cases especially those following abortion, have suffered severely from pain and hemorrhage before we see them, and when they come to us they are profoundly anaemic and often septic; a curettement is accompanied by more than the usual amount of danger; they take the anaesthetic badly and we must always bear in mind the possibility of shock, perforation of the uterus, pulmonary embolism, and septic pneumonia. We make it a rule to give them the minimum amount of ether, (no other anaesthetic should ever be used) and to finish the operation, during the primary stage of the anaesthesia, all the preliminary part of the operation, the washing up, &c., being done before the anaesthesia is started. We use for the curetting, the finger (if the cervical canal is dilated sufficiently to admit it), followed by a large sharp curette, or sometimes a large dull curette; the uterine cavity is irrigated with hot (110° or 115°) water, or normal salt solution."

In malignant growths not permitting a radical operation, a careful curettement and the free use of the cautery, followed by chloride of zinc gives surprisingly good results. In septic conditions when the infection has passed through the endometrium into the muscle of the uterus, to the Fallopian tube or into the cellular tissue around the uterus, or has been carried by the lymphatics to the ovaries or elsewhere over the body, no appreciable benefit comes from the curettement, except to establish the diagnosis and to prove that the uterine cavity is free from all decomposing and septic matter. This is the only way often, to distinguish between a sapraemia and septicaemia. In acute salpingitis he does not advise the use of the curette. In endometritis, accompanying submucous fibroids, he has failed

to see a curettement do any permanent good. In gonorrhœal endometritis he has not had any good results. In cases of chronic endometritis he has not seen this treatment beneficial, and advocates a radical operation from the start. In dysmenorrhœa a dilatation and curettement does good when the condition is due to a pathological flexion. In dysmenorrhœa from neurotic conditions, infantile uterus, uterine adhesions, diseases of the adnexa, &c., and from general conditions, as pulmonary tuberculosis, cachexia, from malignant diseases, anaemia, chlorosis, &c., harm, rather than good follows the curettement. Major operations upon the adnexa should be preceded by curettement.—*Amer. Jr. Obs.* Vol. LII, 773.

THEODORE J. GRAMM, M. D.

THE RELATION OF THE APPENDIX TO PELVIC DISEASE.—Peterson (Ann Arbor) gives his experience in a series of 85 cases, which is practically the same as in a previously published series of 200 cases. This author advocates removing the appendix except in the presence of contraindications, during an abdominal operation performed for other causes. Some of the more important conclusions reached are as follows: In about 50% of the cases thus treated the appendix was on microscopic examination found to be normal, while the remainder showed evidences of acute or chronic inflammation, or the results of former inflammation. The average length of the appendix was about two and a half inches. The appendix was found to be adherent in about 23%, and was adherent twice as frequently in those cases where microscopic examination showed past or present disease. A certain proportion of adherent appendices are perfectly normal microscopically. Abnormalities in shape were noted in 72 of the 85 cases. The appendices were found to be club shaped, constricted or bent upon themselves in 10 of the 27 cases, yet microscopically, such appendices were normal; hence mere shape of the appendix cannot serve as an index of its normality or disease, and they may be perfectly normal. Fecal concretions were found in 16%, one-half of which were otherwise normal; he therefore believes that the existence of fecal concretions does not necessarily denote disease. Of the cases having chronic disease of the uterine appendages 50% had accompanying disease of the appendix. One-half of the cases of uterine fibroma had accompanying or former disease of the appendix, and the same percentage existed in cases of ovarian cystoma. The author thinks since it is impossible for the surgeon by gross appearances alone to determine which appendix is diseased, and since nearly 50% of appendices, where the abdomen is opened for other purposes, are found microscopically to be diseased, it is the surgeon's duty in the absence of contraindications to remove the appendix in every case. Otherwise he will leave behind diseased appendices which may prove a subsequent source of suffering to the patient.—*Amer. Jr. Obs.* Vol. 52, p. 225.

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

STILLINGIA SYLVATICA AS AN "ALTERATIVE."—In the last edition of the *National Dispensatory* one may read under *Stillingia* the statement that this drug belongs to that class credited with powerful alterative properties. The authors add, however, that like all the other members of this class, the evidences of this power are not very convincing. Of course it always depends upon the kind of evidence that is considered convincing. For example, Dr. M. Preston says that he had a case of secondary syphilis in which the patient suffered from bone-pains of an extremely severe character. There were immense nodes upon the head and upon the legs. The patient was a broken down, melancholy, miserable, thin-looking man. The physician prescribed *Stillingia* and almost at once this patient was relieved of all his pains, the nodes disappeared, and the man became buoyant, fat and jolly.

Dr. Simmons also tells us of a little girl who had enlargement of the tibiae to such a degree, that she was deprived of all power of locomotion. Enlargements also existed in other portions of her body, resembling nodes, upon the olecranon process, upon the head. That upon the forehead was as large as an egg. The bones of the nose were also affected, so as to cause considerable depression. The patient could only sit upon a chair, a burden to herself and family; and seemed to be doomed to a miserable existence. She had been subjected to much treatment and had received many remedies. Dr. Simmons decided upon the infusion of *Stillingia Root*. After some months' treatment, this patient could walk, and had the free use of her limbs and the various swellings were reduced. She had been restored to a much better state of health. Here are two experiences. In one the simple homœopathic preparations were administered, in the other, an infusion according to the older therapeutic directions. In each the remedy was undoubtedly efficacious, accomplishing all that one might reasonably expect of a medicine. "The provings show an action upon the human organism closely parallel with that of syphilis." The moral of which is: If we wish to know what drugs are capable of curing, we must prove them upon the healthy, study their provings, confirm our observations at the bedside and thus obtain evidences that are convincing to those of un-biased minds.

THE ANTIDOTE FOR CARBOLIC ACID.—Dr. Freda M. Lankton, in *Progress*,

declare that in cases of carbolic acid poisoning, by accident or design, there is no antidote equal to vinegar—cider vinegar or acetic acid. This has been discovered several times. We believe Dr. Edmund Carlton has been credited with its introduction as an antidote for carbolic acid, Dr. C. L. Kinney was the first to use it internally. Externally, in full strength, it quickly restores the color and functions of the skin that has been subjected to the acid, and removes soreness and other ill effects. Internally, diluted one-half or two-thirds, according to the strength of the vinegar, it should be slowly administered in tea-cupful doses. The cases which illustrate this article are striking and include both the external burning with acid and poisoning from the swallowed acid. The common antidote—alcohol—is satisfactory in many cases, but we are glad to know of another so valuable antidote as the common cider vinegar, which may so easily be obtained in an emergency.

CADMIUM SULPHURATUM IN CANCER OF THE STOMACH.—Those of us who have had an experience including several cases of cancer of the stomach, know how difficult it sometimes is to find the remedy that will assuage the pains and ameliorate the persistent vomiting. We also know how often we have been disappointed in the action of Arsenicum, Phosphorus, Bryonia and other remedies, even when such have been selected after pains-taking differentiation. It is not an easy condition to ameliorate and there are many reasons why we physicians are sometimes forced into the use of palliatives. *Cadmium sulphuratum* is a remedy that fills a niche. One is impressed, while reading its provings and the description of its effects upon animals, by the powerful action exerted upon the stomach. Retching, vomiting of dark, coffee-grounds like fluid, burning, lancinating pains in the stomach, prostration, coldness and exhaustion; erosion and actual ulceration of the gastric mucosa; these are its pathogenetic effects. It almost makes one blush when, after reading of such effects in allopathic books, we find that they have found "some of the cadmium salts useful astringents in gonorrhœa and in conjunctivitis." Physicians of the homeopathic school, however, have made some useful therapeutic deductions from its pathogenetic effects; for we read that it has relieved the most dangerous symptoms of yellow fever in the hands of southern physicians; and not only in one case, but in hundreds of such cases. The dreaded "black vomit" has yielded to the cadmium sulphuratum. When used in gastric cancer, it has ameliorated the lancinating, burning pains, the persistent dark vomit, the inability to retain any food or drink. Dr. Kent, to whom rightly belongs much of the credit for its use in gastric cancer, has related a case in which its administration enabled such a patient to eat and to retain food, while at the same time pains and vomiting ceased. This author gives us a symptom that differentiates it from Arsenicum: The absence of the Arsenicum restlessness, and the desire to remain quiet. It has in common with Arsenicum and some other remedies, the dark vomit, the burning pains and the great irritability of the stomach.

STAPHISAGRIA IN FACIAL NEURALGIA.—An old lady, aged 87 years, had been a sufferer from what was considered to be neuralgia, for several years. It was infraorbital in location, and was paroxysmal. The touch of

food or a spoon or anything else put into the mouth, caused the pain to increase. All her teeth had been extracted without permanent relief. Many things had been tried. *Staphisagria* acts like a charm. The thirtieth potency relieves at once. After eighteen months, it has not lost its efficacy. This interesting report of Dr. Blackley confirms many excellent results which we have had with this remedy. Dr. Stonham has found the same remedy quite useful when, after tonsillectomy, the patients had great pain in the neck with sensitiveness to touch. The thirtieth relieves quickly.—(*Journal British Soc.*)

SODIUM CHLORATE SPECIFIC IN FURUNCULOSIS.—According to Dr. Church, there is one remedy that may be considered “a specific” in furunculosis. He recommends physicians to try this drug as follows: *Sodium chlorate*, one and one-half drachms; water four ounces. Mix and take a teaspoonful every three hours. The boils present will die; they will have no successors. It is wise, continues the author, to see that the common chloride of sodium is not substituted for the sodium chlorate. (*Eclectic Medical Journal*.) This was the remedy that was recommended so highly by Boucher of Rouen, in *Therapeutische Wochenschrift*, 1896, in the palliative treatment of cancer of the uterus. He used it internally, and externally upon intra-cervical tampons; and claimed that it prolonged life and made life tolerable for the sufferer from this malignant affection.

ADRENALIN CHLORIDE IN OEDEMA OF THE UPPER AIR-PASSAGES.—Dr. S. E. Earp, in *Medical Summary*, thinks that adrenalin chloride may be used with a high degree of confidence in œdema of the larynx or in œdema of any mucous surface that can be reached by the cotton applicator or the spray from an atomizer. He also used the remedy hypodermatically in doses of ten minims of the solution. In cases in which a fatal issue seems impending, such an expedient must be of inestimable value.—*Med. Visitor*.

IBERIS AMARA SUGGESTED IN CARDIAC DYSPNOEA.—We have several times referred to the efficacy of the Bitter Candy Tuft in cardiac diseases, and now offer the suggestion, based upon some experience, that this remedy may prove of use in the paroxysmal attacks of dyspnoea that are so common in cardiac dilatation and which are so difficult to cure—that is to prevent recurring. The first decimal dilution has been used. We lack clinical data in the recorded cases to be found in our literature. In our own experiences we have noted the following facts: When the attacks begin about two A. M., the patient being awakened by palpitation or violent action of the heart. No pain. Then comes a tickling in the larynx, then the throat and trachea seem to fill with mucus, which is expectorated as a white, frothy sputum. The cough is severe and causes redness of the face. Then dyspnoea is severe for one or two hours, with profuse sweating of the whole body, with coldness of the lower limbs and of the hands. The patient cannot lie, but sits up slightly bent forward. The lesions found in the heart are dilatation with evidently some hypertrophy, because the heart's action seems strong and tumultuous, while at the same time, the pulse is *not* strong, but weak, irregular and thready. The kidneys being

active, as shown by free passage of clear urine without albumen. This data is scanty, but suffices to show that the trouble is likely organic and that the dyspnea is evidently cardiac. The physical signs of dilatation are distinct and classical. We have observed effects of a striking kind from *Iberis* 1x in such a picture as described. Other remedies failing in the cases.

IDEALISM IN THERAPEUTICS.—Practical papers on *Materia Medica* should consider the pathogenesis of drugs as compared with certain *groups* of diseased individuals, as well as variations from the more or less fixed types. The careful and critical study of cases treated, may thus result in the improvement of the technique of the prescriptions for a given disease, so that the mortality of the latter may be lowered. For example; a careful investigation of the relation of the various drugs to pneumonia, ought to so improve our knowledge, that four per cent. of those dying of that disease could be saved. This would spare four thousand lives to our country each year. Studies of this kind ought to be the principal object of homœopathic medical societies. If the work cannot be or is not performed by existing bureaus of *materia medica* and clinical medicine, then separate departments for such clinical research should be organized.

The earnest and persistent pursuit of such studies and their exemplification in our practice, in our colleges and in those public institutions under our control, will do more for the propagandism of homœopathy than any other measures that can be devised. It is not sufficient that we cure cases under our care, the homœopathicity of the remedies prescribed must ever be manifested as the salient feature of our clinical work.

The title of many physicians to fame, rests upon their additions to the knowledge of one disease. When individuals are content to devote the best efforts of a lifetime to the study of the pathogenetic and therapeutic relationships of one drug, they may hope to leave a rich legacy to homœopathy and an enviable reputation to posterity.—William A. Geohegan, M. D., in *New England Medical Gazette*.

PHOSPHORIC ACID IN DIABETES MELLITUS.—Dr. Frederick Kopp, in *Homœopathic World*, says that several cases of diabetes mellitus, in males, have been permanently cured by five minim doses of Phosphoric Acid in the first decimal dilution given three times daily. He prescribed this remedy upon the indications:—Frequent desire to urinate, accompanied by pains in the loins. There was also great emaciation and prostration. Attention was of course directed to the dyspeptic symptoms which supervened from time to time; and these latter complaints were met by occasional two minim doses of *Nux Vomica* in the first decimal dilution. Bran bread was ordered in place of the ordinary flour bread. The action of the phosphoric acid was very prompt, its beneficial effects being noted after a week's treatment. Recovery ensued after five months' treatment. Perhaps the dosage was important in these cases, but we have several times seen phosphoric acid fail to influence cases of well marked diabetes mellitus which were apparently suitable ones in which to prescribe this remedy. The experiences of other physicians with this remedy would be of value to us in passing upon its value as a curative remedy.

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THE MATERIA MEDICA PURA: ITS WORTH: ITS MISSION.

AUG. KORNDORFER, SR., M. D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of Pennsylvania, September, 1905.)

WHEN Hahnemann, convinced of the inadequacy and unreliability of the accepted Materia Medica, sought to improve the material of its construction, he fully appreciated what Withering so aptly had expressed, "that the task could be accomplished only by taking up the subject as altogether new, and rejecting the fables of the ancient Herbalists, build only upon the basis of accurate and well conceived experiments."

A task of such inherent difficulty and of such extended scope, one that had from the earliest days of medicine defied solution, required for its successful issue a mind peculiarly gifted and specially prepared for the work. One, earnestly seeking the truth, capable of perceiving it, and willing to accept it for its sake alone, whithersoever it might lead.

Hahnemann, whose studies embraced the medical lore of every civilized people, had become deeply impressed with the utter worthlessness of the then existing Materia Medica, and with the equally worthless and grossly empirical therapeutics. His professional instinct rebelled at such lack of positive knowledge and such utter helplessness at the bedside of the sick. His conscience was aroused and to him the appeal of conscience was a Divine command. His every energy soon bent to the task of developing a pure Materia Medica; with singleness of purpose and unflagging zeal he spent his long life in labors fruitful to this end.

Step by step he advanced in his investigation, research and philosophy, until he was able to give to the profession those masterpieces of research, reasoning and philosophy: *The Materia Medica Pura*, *The Chronic Diseases* and *The Organon*.

In the preface to the *Materia Medica Pura*, Hahnemann, speaking of the sources upon which the profession had relied for a knowledge of drug action in disease, says: "The humiliating confession must be made that most of the virtues of medicinal bodies were discovered by accidental empirical experience, by chance," and chance, says Hahnemann, "excludes all method." Surely a most unworthy and pernicious plan in a matter fraught with such weighty obligations to, and far-reaching effects upon, the entire human family.

Hahnemann's education, governed possibly by a natural mental trend, led him to the idea that in this, as in every other field in nature, law must govern. Under the inspiration of this conviction he pursued his investigations and developed his philosophy.

As early as the year 1796 he presented to the profession his views as to *method* in an "Essay Upon a New Method for Ascertaining the Curative Powers of Drugs." In this essay he presented much valuable food for thought. During the subsequent decade he followed up the plan therein suggested, making a series of experiments upon himself. The result of his personal provings and research was the publication of the *Fragmenta de virbis Medicamentorum*, a little volume of 269 sparsely covered 12mo. pages. This was given to the profession in Latin, the language of medicine of his day. In this work we have the initial publication of real *Materia Medica*, that is to say, a true record of actual drug effects upon the human organism.

Small as it is, and incomplete, it deserves high rank as the pioneer publication in this field of research. Indeed, it is the germ from which was developed the *Materia Medica Pura*—a work that represents an amount of personal effort and sacrifice never approached by other workers in this field of labor.

The symptoms recorded are an expression of the actual drug effects experienced by himself and his fellow provers, together with credible observations from other members of the profession. Not a line but received his personal inspection, critical scrutiny and approval. Nevertheless, we to-day hear the veriest tyros criticising this work of Hahnemann's as

though, forsooth, they were masters of the art of proving and he but a stumbling amateur.

They complain—"it is old, it is antiquated." But, truth never *grows old*, nor is it *new*, save in the finding only. Its foundations are laid in the ages, it knows neither age nor youth, it is the same yesterday, to-day and forever.

Hahnemann's *Materia Medica Pura* is as useful to-day as in the days when it came fresh from the hands of its maker. Yea, more so; the multitude of confirmations from the hands of the profession have greatly enhanced its value and extended its field of usefulness.

Hahnemann instituted an accurate and comprehensive method of research, a method that guarantees the genuineness of every recorded fact; a method based upon logical sequences, leading unerringly from given causes to given effects; a method that practically eliminates error, masters detail, reveals principles and makes possible the unveiling of laws under which natural forces act.

Under the inspiration and guidance of such method Hahnemann solved the problem of the development of a pure *Materia Medica* and a reliable drug therapeia. Through this method he acquired a knowledge of principles and laws theretofore unknown, and succeeded, not only in developing *Materia Medica* upon a scientific basis, but in discovering the controlling law in drug therapeutics.

But we must not rest content with the limit of knowledge reached by Hahnemann; there are still other truths to unfold, other laws to discover. Let us follow Hahnemann in the spirit of freedom which he claimed, but forget not the spirit of truth and honesty that controlled him in all his work. Adhering strictly to the logical method, let us search for knowledge wherever it may be found, and accept whatever is demonstrably true. Mistakes we may, we will make, but to be deterred by fear of such would be but to stop all progress and prove ourselves unworthy to be called his disciples.

Hahnemann believed most thoroughly in the old adage, "Prove all things, hold fast that which is good." Unfortunately for the profession, the present generation has departed from this line of action.

Skepticism is rampant. Doubt possesses such a fascination that its luring light leads the masses to an intellectual nihilism. Doubt that leads simply to disbelief, belongs to the

grossest of errors; it not only hinders research, but too often leads to the placing of stumbling blocks in the way of weaker brethren.

Doubt? Yes: but doubt to investigate, and let your investigations be thorough and your conclusions guided by judgment ripened through an enlightened experience.

Hahnemann devoted years of patient, painstaking research to the problems that confronted him before he made public the conclusions at which he arrived, thus conforming to the old saying, "Let your literary compositions be kept from the public eye for nine years." He published his first essay upon "A New Method for Ascertaining the Curative Powers of Drugs" in 1796, after seventeen years of observation and practice. The "Fragmenta," a direct outgrowth of this new method, appeared in 1805, and the "Materia Medica Pura," a continuation of the same line of research, was published in six volumes, between 1811 and 1821. This latter work was preceded by that masterpiece of medical philosophy, "The Organon," in 1810, and followed in 1828 by that crowning work, "The Chronic Diseases," presented to the profession after eleven years of research and study, bearing upon this phase of medicine. I mention these facts in passing to show how thoroughly matured was his work before he gave it to the profession. So accurate, indeed, was it all that not a characteristic symptom recorded by him has been discredited by any competent observer.

Just here a word upon the value of symptoms as guides to the selection of the curative agent. It is often asserted that Hahnemann laid too much stress upon symptoms, in that he considered them the only reliable guides in the selection of the curative agent.

In Section 18 of the *Organon* we read, "from this incontrovertible truth, that besides the totality of the symptoms it is impossible to discover any other manifestations by which diseases could express their need of relief, it unquestionably follows that the totality of the symptoms in each individual case of disease can be the only indication to guide in the selection of the remedy." In Section 6, however, he speaks of "morbid signs and symptoms," and of "deviations from the previous healthy condition of the patient, felt by him, and recognized upon him by his attendants, and observed upon him by the physician." If we consider the thorough analysis of the

symptoms and signs of disease intended by Hahnemann, and recall the fact that such analysis was designed *for the selection of the remedial agent*, we must admit that his views still hold good, despite all the advance made in pathology. For, notwithstanding the wonderful advancement in our knowledge of the physiologic functions of the various organs, and the equally marvelous advance in our knowledge of the morbid changes consequent upon disease, it still remains true that for therapeutic purposes the symptomatic picture presents the most reliable and specific likeness of each individual case of disease.

One of the most cogent reasons for insistence upon the importance of the symptoms, is found in the fact that drugs which have the power to induce very similar pathologic changes, prove curative only in markedly different symptomatic complexes. To illustrate: It is a well known fact, and readily demonstrated, that identical pathologic changes may result from the poisonous effects of many drugs of widely varying properties. Thus we find aconite, arsenicum, bryonia and phosphorus in toxic doses capable of inducing congestion, inflammation and pain in the lungs, accompanied by a characteristic rise of temperature, cough and sputum. Now, though in each case the pathologic lung change may be practically the same, no experienced physician would consider these drugs as succedanea in such diseased state.

The pathologic change does indeed point more or less emphatically to a certain line of remedies; but the symptoms of the individual case remove it from such indeterminate class relationship, and place it in individual therapeutic remedial relationship with some one specific drug. The symptoms, we might say, define the personal equation of the patient and thus make possible a positive choice.

Without a perfected symptomatology based upon the Hahnemannian method of proving, such symptom portraiture would be impossible, lacking which, treatment must ever remain indefinite and empirical.

It might be well here to recall the fact that this method itself would be inoperative had not the potential energy of the triturations and dilutions been discovered. To illustrate the importance of this feature, let me recall an incident: When Hahnemann wrote Hering of the wonderful powers of the *carbo vegetabilis*, Hering promptly instituted some experiments with the lowest triturations, which failed to develop re-

sults. He wrote Hahnemann, who replied that the preparation was too low, and gave instructions to triturate "higher and still higher." After the sixth trituration was employed, symptoms were developed, and in practice curative results were obtained.

In 1851, Jahr called attention to the fact that all poisonous drugs when given in crude doses produce very similar effects upon the human organism. "This," he says, "has its meaning for us in practice, not as applied to the greater or less efficacy of the potencies, but as applied to the development of the peculiarities of the remedy, so that the higher we ascend the more clearly are the special and peculiar characteristics of the remedy manifested." His observations have been confirmed times without number by the best observers in our school. More recently confirmations have come from other sources. Thus, Sajous, one of the most astute observers of the old school, remarks upon the similarity of symptoms resultant upon the use of toxic doses of all poisons. In verification of his assertion he instances the action of many and widely different drugs, such as aconite, antimony, arsenic, belladonna, camphor, carbolic acid, copper, digitalis, phosphorus and many others, each producing marked muscular weakness, lassitude, sense of general wretchedness, paralysis, abdominal pains, fever, difficult respiration, scanty urine, liquid, abundant stools, coma and convulsions.

Again, it is a well ascertained fact that poisons in large doses produce such similar, if not identical, effects, upon the blood that it is difficult to distinguish between them. Sajous refers to this feature in the following words: "The toxic agents analyzed in Wood's Therapeutics represent all those in which reference to blood changes have been made, and we thus have ample evidence that all agents capable of acting as toxics, may give rise to disintegration of the blood similar to those which were herein described as being of suprarenal origin."

Another feature worthy of note is that the difference in effect of large and small doses is being emphasized by many observers in the old school ranks. Thus the difference between the observations of Mosso and Delezenne, upon the action of strychnine, has been attributed to the fact that the latter used smaller doses of strychnine than did the former, thus producing central contraction and peripheral dilation of the blood vessels, instead of central dilation and peripheral contraction, as observed by Mosso.

Despite such well authenticated facts, the illogical methods of medication so persistently adhered to by the rank and file of the old school tends toward the continued employment of the long established doses of the *Pharmacopæia*.

Hahnemann established beyond reasonable doubt the curative action of infinitesimal doses of properly prepared drugs. Recent observations by old school investigators have confirmed and emphasized the fact that infinitesimal quantities of given drugs have a most potent effect.

Thus, for instance, it has been proved that a drop of a 1-10000 solution of adrenalin is sufficient to blanch the conjunctiva; and further, this substance was found to be equally active as a blood pressure-raising substance, 1-200000 gramme intravenously injected into an adult being sufficient to produce a distinct effect.

A recent editorial in the *Journal of the American Medical Association* presents a review of some facts relative to the action of copper and its salts on certain organisms, calling attention to the remarkable efficacy of a solution of one part of the sulphate in 2,000,000 parts of water. Gildersleeve and Stewart have published reports of their investigations on the bactericidal action of copper and its compounds, especially with reference to the typhoid colon group. From these studies it appears that ten hours proved sufficient to destroy the life of such bacteria, the *B. coli communis* and the *B. dysenteriae* being slightly more resistant. Stewart found "that in a one liter copper vessel, one part of copper to 4,000,000 of water was dissolved in three hours, and this amount of copper was sufficient to kill the added typhoid organisms in from one and three-quarters to two and one-half hours." We also find it stated that "water in reservoirs easily can be made safe by such treatment with copper."

Jackson reported before the New York section of the American Chemical Society that "the sulphate in dilution 1 to 8,000,000 administered once or twice a year, is sufficient to prevent all trouble from microscopic growths" in reservoirs, and "this dilution is so great that in order to obtain a medicinal dose it would be necessary to drink forty gallons a day."

Is it not incomprehensible, that with this startling evidence of the wonderful dynamic power of infinitesimal quantities of this drug, no effort has been made by the old school to press to a definite solution the question of the action of equally minute doses upon the human organism.

Such infinitesimal quantities simply *dissolved* in water proving sufficient to kill bacteria, in a reservoir, is it unreasonable to suppose that the same, or even smaller quantities, if properly potentized, would prove potent when administered as curative agents in disease?

Hahnemann made the experiment, receiving an affirmative response, when he made his provings of copper, nearly a century ago. He gave the results of his investigations to the profession in the third volume of the *Chronic Diseases*. In the pathogenesis of copper we find 387 recorded symptoms, the essential characteristics of which have been verified by hundreds of most trustworthy observers.

We must also note that Hahnemann was led by these provings to recommend the copper in the treatment of cholera; and when we recall the fact that Hahnemann looked upon the contagious matter of cholera as composed of myriads of invisible, probably animated, and perpetually reproductive beings, we find still another illustration of his wonderful grasp of the pathologic factors possible in disease.

An analysis of the symptoms of camphor, cuprum and veratrum led Hahnemann to recommend their use in cholera, each in accordance with their characteristic symptomatic indications, long before he had an opportunity for personally treating a case of this disease.

The provings of these remedies present perfect pictures of cholera, each has extreme weakness, exhaustion, sunken eyes, bluish and cold face and hands, with coldness of the rest of the body, burning in the stomach and œsophagus, discouragement, anxiety, sense of suffocation, moaning, hoarseness, hippocratic face, cramp in the calves and other muscles—but, here the pictures begin to vary, each showing some characteristic individuality; thus camphor, which is suited to the initial stage of the disease, has neither thirst, nausea, vomiting nor purging; whereas cuprum, indicated later, has intense thirst, and when drinking, the fluid descends to œsophagus with a gurgling noise. Nausea is severe, but is relieved by drinking cold water. Vomiting of a watery fluid, mixed with whitish, yellowish or reddish flakes, is characteristic, and the stools, which are frequent, present a very similar appearance. Veratrum has an equally intense thirst, but lacks the peculiar gurgling noise when swallowing noted under cuprum. The nausea is intense, but instead of being relieved by drinking cold water it

is markedly aggravated. The vomiting is severe, the vomited matter being acid or bitter, foamy white or yellowish green mucus, or black and bloody. The stools are watery, greenish and flaky, or white like rice water, and almost painless.

These remedies afford an excellent illustration of the difference between the pathologic similarity of the diseased individuals, from which standpoint all are equally indicated; and the true Hahnemannian similarity, in which the totality of the symptoms of the individual case must be accurately covered by the symptoms of the homœopathically indicated remedy. Herein lies one of the greatest benefits to the science of therapeutics; Hahnemann opened the way to a correct understanding of the individual characteristics of each proved remedy, and emphasized the importance of the true symptomatic similarity which must ever constitute the basis for the homœopathic prescription.

True, the pathogeneses which he gave us are voluminous and difficult of mastery, but they represent the unalloyed effects of each proved drug, and are easily within the reach of every real student.

Hahnemann's work has been the object of much groundless and unreasoning censure by the ignorant and slothful, but on the other hand, it has been the source of unceasing comfort and ever increasing power to every true follower of his teachings. Our *Materia Medica* must ultimately afford material from which may be constructed a definite counterpart to each individual case of disease, and such totality will ever invariably correspond to the existing pathologic state.

Let it be remembered that by the term *similarity of symptoms* Hahnemann understood not merely the given sensation or condition, but he included location, aggravating and ameliorating circumstances and all concomitant conditions related to such sensation or condition. This Hahnemann taught explicitly in the *Organon* and made accessible in the *Materia Medica Pura* and the *Chronic Diseases*.

A careful review of the work being done in the laboratories of the old school to-day accentuates Hahnemann's teachings in regard to the necessity for a thorough symptomatic proving of each drug incorporated in the *Materia Medica*. True, provings may be made upon other lines, but the symptoms will ever remain the most valuable guide for the therapeutic selec-

tion of the curative agent. Again, laboratory investigations have given unmistakable proof in support of Hahnemann's assertion that crude drugs have such an overwhelming effect upon the various functions that all the finer distinguishing characteristics are positively lost—a demonstration of the fact that for guidance in the selection of the therapeutic remedial agent such provings are comparatively worthless.

Effects thus crudely portrayed fail to enable us to differentiate similar acting drugs, and as a result, even the semblance of a scientific prescription becomes utterly impossible. For homeopathic application we must reach a knowledge of the finer dynamic action of each drug, and such is best expressed through the symptoms and is best obtained from provings of the potentized drug.

Even allopathic authorities recognize the effects of infinitesimal quantities, the 1-1000, 1-10000, 1-50000, 1-200000 of a gramme having produced marked physiological effects.

They recognize the fact that so small a quantity of matter as may be dissolved by water from a gold or silver vessel may have a poisonous effect upon certain algæ. That there is a dynamic force in light varying to a degree according to its source. Phototherapy and radiotherapy are accepted as valuable additions to their means for combating disease. Radium has added its wonders and given to the world an instance of tangible and measureable dynamic force, and of the comparatively infinite divisibility and permeability of matter, notwithstanding which, materialism still maintains strong hold upon the masses.

The many points adduced bear evidence, however, to the fact that the old school are gradually awakening to a realization of the potency of the infinitesimals, and of the applicability of dynamic force independent of the quantitative relationship of matter. These facts are but added proofs of the soundness of the philosophy which Hahnemann taught, and of the reliability of the work which he wrought under such bitter trial and opposition.

Our *Materia Medica* is of inestimable worth in that it presents the pure effects only of the given drugs, and further, because it affords a brilliant example of the method for developing this department of medicine to its utmost limit.

The old school are fast appropriating every discovery which Hahnemann made. Ridicule and professional ostracism was

his portion, but now, guided by the exact method which he taught, these old opponents are being led to the adoption of his views. We find the law of similars recognized as a rule of practice; the nosodes which excited their wrath and most vituperative opposition have now become the corner-stone in their treatment of contagious and infectious diseases; the infinitesimals more recently have been received with a certain favor; and polypharmacy, which was denounced by Hahnemann as unscientific and irrational, is fast falling into disuse.

Leading investigators are accepting one or all of these fundamental truths, but we look and listen in vain for a word of recognition of the influence of Hahnemann in this far-reaching work of reform.

The mission of homœopathy and its *Materia Medica Pura* is daily being accomplished. Thinking physicians are being aroused to a just appreciation of accurately conducted scientific investigation, realizing that every confirmed fact is but a link in the chain which ultimately must bind science, including medicine, into one generic whole.

Let the work wrought by Hahnemann be as a beacon light to every conscientious worker in the field of medicine, guiding the investigator into all truth. Let it excite in every conscientious physician a spirit of emulation and a heartfelt devotion to duty, then shall our school have accomplished its mission and Hahnemann's name will be enshrined with the greatest discoverers in the field of medicine.

THE MODERN VS. THE "OLD-FASHIONED" METHODS IN THE DIAGNOSIS OF PHTHISIS PULMONALIS.

BY EDWARD R. SNADER, M. D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of Pennsylvania, September, 1905.)

It appears to me to be about time we "took account of stock" concerning the relative value and relationship of the several methods employed in the diagnosis of phthisis pulmonalis by men acquainted with the real difficulties attendant upon the diagnosis of that affection, particularly in its earlier stages. It will probably be readily conceived that the various methods are not of equal value. It would seem to me, therefore, it would

be wise for us to give the relative relationship and value careful, practical consideration. Since the bacteriological diagnosis is relatively so much easier of performance, requiring far less technical skill and, withal being to many the more fascinating of the methods, and apparently more in accord with the trend of modern medical diagnosis than the older methods of what has been known as "physical diagnosis," this consideration of methods is, perhaps, the more necessary.

A consideration of the factors involved in a solution of the problem of the selection of the method of diagnosis of so common a malady as phthisis pulmonalis is of immense practical importance, particularly to our younger men, to many of whom the bacteriological method is so satisfying and the acquirement of skill in the more ancient ways so exceedingly difficult, time-consuming and trying.

This paper will offer nothing whatever of interest to those physicians, if physicians they be, who make their diagnosis of pulmonary maladies from the symptoms alone, asking and receiving no aid from either percussion or auscultation or from microscopic findings. That sort of diagnosis (that is, one made upon the presence of a significant symptomatic group alone) is so abhorrent to men who are in search of positive information, information as decisive and unequivocal as science can make it, that this slipshod manner of doing things diagnostically is entitled to no further consideration, for such symptomatic diagnoses are always "uninspired" guesses and at that they can only be guesses when the case is beyond the possibility of any palliative therapeutics. But I *do* want to talk to those practical physicians who care not only for diagnosis for the "science" of it, but for the firm grasp on the therapeutic and prognostic situation which is given alone by a rational diagnosis.

Among the older men, skilled in the methods that are unfortunately tending to become "old-fashioned" among those who have never really acquired a practical working knowledge of the value of inspection, palpation, percussion and auscultation, these latter modes of interrogating the thorax were, in an overwhelming majority of instances, equal to the task of diagnosing phthisis pulmonalis at an early stage. While these measures were quite equal to the task of diagnosing tubercular lung maladies, these skilled men nevertheless gladly welcomed the new light thrown upon the subject of diagnosis by the findings

of bacteriology as a further means of rendering their diagnoses made by the older methods still more positive. These same men, however, regret to see a growing tendency to relegate these effective means to the background in favor of the far less positive methods of bacteriology. Let us not, however, be misled as to the real state of affairs, because the older methods are cumbersome, difficult to acquire and time-consuming, and consider the more easily-mastered findings by the microscope the more certain and decisive diagnostically. A very little consideration, indeed, will show the falsity of such a position, and real knowledge concerning the diagnosis of this malady will be hampered and hindered ultimately by the adoption exclusively of the merely bacteriological method.

Whether the tubercle bacillus is, or is not, the cause of phthisis pulmonalis has nothing whatever to do with the diagnostic value of the discovery in sputa of that micro-organism. Practically, it is enough to know that the tubercle bacillus is found in connection with lesions we clinically call tubercular, and its presence in such lesions makes it of value in diagnosis, whether the disease is, or is not, caused by the bacillus of Koch. The value of the bacillus diagnostically, therefore, lies altogether in the closeness of association of the bacillus with the tubercular lesion. How close this association is will be developed later; but we must certainly recognize that upon the closeness of the association its whole value in the diagnosis of pulmonary phthisis depends. Practically Koch's bacillus is not always found in connection with lesions we know to be tubercular, or that pursue the same course clinically that diseases do which show the tubercular bacillus. In acute miliary tuberculosis affecting the lungs as a part of a general tubercular process, or existing separately, it is well known to all clinicians that the bacillus, if discovered at all, is found so late in the progress of the case that the malady has long before been diagnosed by other means. That the bacilli are not always present in the sputa of patients living or dying with lung tuberculosis is, of course, against accepting its absence as positive evidence that no disease of a tubercular character is present. The absence of the bacillus, then, does not positively settle the diagnosis as against the presence of the disease. Of course, it is perfectly evident that the germ may be in the materials derived from the chest by the act of coughing, and our technique be not sufficiently developed to discover it, or

we may not have secured the sputa from the really affected area, or there may be no sputum, or none obtainable that is "representative," and there are many other obvious reasons why we do not always discover the micro-organisms in the sputum of a phthisical patient. In many instances, indeed, we are reasonably sure that the bacilli are "back in the tissues," setting up their peculiar havoc, but have not yet "broken through" the mucous membrane, and thus become enmeshed in the morbid material of the sputa. Whatever the explanation (and many more "excuses" might be added to those already given), certain it is that there are undoubted cases of phthisis pulmonalis, observed over long periods of time, in both private and sanitarium practice, in the care of absolutely competent clinicians, in which the tubercle bacillus has never been found in the sputum of patients who were unquestionably tubercular, after repeated, regular and exhaustive examinations. Besides, the purely microscopical method is dependent upon the presence of sputa, and a certain number of adults, most infants, and many children, do not have sputa available for diagnostic purposes. It is true, that in children, by a trick, which in some cases amounts almost to traumatism, you may obtain some sputa, but it is not likely to be "representative." Here, again, if sputa be obtained, a negative finding does not exclude disease of a tubercular nature. In this connection, too, think of a man waiting for the sputa before he makes his diagnosis. Think, too, of the number of patients in which this waiting for a bacteriological diagnosis would have to be practiced, and with such thinking one of the limitations of the exclusive method of diagnosis by the 'scope becomes evident, much to the disparagement of that means.

From the standpoint of practical diagnosticians, then, we cannot affirm that we have any right to erect the tubercle bacillus as the sole or the final arbiter and judge in the diagnosis of a lung lesion. On the other hand, is the tubercle bacillus, when found in coughed-up sputa, absolutely diagnostic of active tuberculosis? Hardly. Think for a moment of the numbers of cases of cured tuberculosis annually being discharged from the sanitariums especially devoted to the treatment of pulmonary tuberculosis, their sputa still containing tubercle bacilli. These cases were clinically cured. Aside from the light which this fact throws on a certain phase of this subject, there can be no reasonable doubt but that the tubercle

bacillus may be accidentally present in the sputa of individuals not suffering from clinical tuberculosis of the lungs. We have, fortunately or otherwise, some interesting parallels of this fact in the not infrequent discovery of the pneumococcus, of the Klebs-Löffler bacillus, and of other micro-organisms, pathogenic in nature, in the sputa of individuals presenting none of the clinical phenomena ordinarily found associated with particular micro-organisms. In other words, the subjects with pneumococci in their sputa did not have clinical lobar pneumonia, and did not subsequently develop it, and those with Klebs-Löffler bacilli in their sputa had no diphtheria. This latter fact was demonstrated time and again in the city of Philadelphia during the many diphtheria epidemics to which that city has been subject, and also by the investigation of the sputa and nasal discharge of patients visiting the nose and throat department of a dispensary for the treatment of all manner of nasal and laryngeal diseases in which the Klebs-Löffler micro-organism was found in an enormous number of throats without any of the clinical phenomena of diphtheria. I think no reasoning man will accuse me of attempting to manufacture evidence or of splitting hairs over a theory when I think it is reasonable to suppose from these well authenticated facts that the tubercle bacillus may often be present in the sputa of patients by accident, and that many of these patients are not suffering from, and do not, and have not, suffered from clinical tuberculosis. The tubercle bacillus is in the sputa it is true, but that fact alone is not necessarily evidence, certainly not indubitable evidence, that the germ has set up its peculiar havoc in the lungs. Its presence in the sputa is diagnostic of its presence in the sputa, if you will permit the phrase, but its presence does not always of necessity imply that the subject's lungs are already tubercular, and that the discovered bacillus came from the affected area.

The tubercle bacillus, then, is not constantly present or discoverable in sputa derived from lung lesions unquestionably tubercular in character, and, therefore, its absence is not conclusive proof that no tubercular lesion is present; and, further, when present, the bacillus is not an absolute, an unequivocal, a pathognomonic sign. It is true that both these extremes of statement are rarities, diagnostically, but they are sufficiently frequent to warn us not to fall into the error of making our diagnosis like machines, without mixing a little brains in the

problem, and without questioning every single factor that goes to make up the ultimate diagnostic conclusion, with all its weight of weal or woe. Rare or frequent, this aspect of the subject has its practical value, for, if the presence of the tubercle bacillus were pathognomonic, we would have made a distinct and positive stride toward the correct diagnosis of phthisis pulmonalis; and, if it were always present in tubercular lesions, and always accessible to discovery, its value would be infinitely enhanced, for, when not present, we could affirm the absence of tuberculosis, a point of as much value in practical diagnosis as the direct diagnosis itself.

We have been crying out for some means to diagnose phthisis pulmonalis early, for we have realized that the earlier the discovery of the malady the more certain we were to stay its ravages; and for a little while we thought we had discovered this desideratum in the finding of the tubercle bacillus in sputa; but, alas, we soon found that when we found the tubercle bacillus in the sputum the case was no longer an early one. We have learned, that, in the very early stages of this affection, in many, very many cases, indeed, there is only a slight hacking cough, or none at all, and no expectoration, or none in which we could find the tubercle bacillus (even if it were present in the lungs) for long periods of time, before the development of a group of suggestive symptoms of a beginning lung malady; and yet all this time many of this class of cases were being diagnosed as early phthisis by percussion and auscultation. Take into consideration here the facts that if the presence of the tubercle bacillus were pathognomonic of phthisis pulmonalis, its discovery by the 'scope would still be a defective method of diagnosis, employed to the exclusion of other methods, in some respects, namely: While it could tell the presence, the findings in the sputa could not determine the situation, the stage, nor extent of the disease, all admittedly factors in a full diagnosis, in some instances of great moment. In this connection, too, it must not be forgotten that aside from the cases in which there is no sputa, or in which it is difficult to obtain, or in which we have to wait for a long time to secure "representative" expectoration, there are a very large number of cases in which we can only get sputa at the expense of great annoyance and sometimes almost violence, namely, in infants and many children. I might say, in passing, that if we wish to have a practical demonstration of the value of the

older methods of diagnosis as compared with the purely bacteriological ones, just spend a few months in the general medical wards of a children's hospital, and you will be more enamored than ever of your old and tried methods of ascertaining whether lungs are consolidated or have cavities. You will make ninety diagnoses of pulmonary maladies by the older methods where you will make one by the methods of the microscope with which you are fully satisfied. It is perfectly evident to observing clinicians that tuberculosis in infancy and childhood is very prevalent, perhaps not more prevalent than formerly, but now discovered more frequently, and this increased discovery of pulmonary lesions at these periods of life is due almost entirely to the efficacy of the older methods of percussion and auscultation, and hence men of practical experience are recognizing the absolute impossibility of correctly diagnosing or excluding the thoracic affections of early life without the employment of the ancient methods, and in more than nine-tenths of this enormous class of cases (relatively) the discovery of micro-organisms in the sputa plays no part whatever. In casting up the relative value of these methods as applied to these chest affections of the young, it must be recollected that most of these diagnoses are objective, and by the method of exclusion, and hence the negation of physical signs to auscultation and percussion becomes of infinite value, far more so than the negations of the microscope, even if that method were as readily available as the older means.

I think we may say that the tubercle bacillus in sputa is a *physical sign*, sometimes present, and sometimes absent, in pulmonary tuberculosis, ordinarily not found early in the disease, and that its absence from even successive specimens of sputa does not absolutely exclude tuberculosis. The tubercle bacillus is a sign discovered by *inspection*, if you please, and, when found in connection with certain physical signs, ascertained by the older methods, of great value as disclosing the probable nature of consolidations or cavities, but that the tubercle bacillus by and of itself does not tell the seat, the situation, the stage, the extent, or whether the lesion is active or quiescent, nor does it give any information concerning concomitant physical conditions associated with the various phases of phthisis pulmonalis in its progress either up or down. In this summary it is presumed that it is remembered that the micro-organism may be accidentally present in the expectoration, and

that the fact of its probable accidental presence can only be assured by the absence of physical signs obtained by percussion and auscultation, and often also by the absence of the rational symptomatic phenomena suggesting phthisis pulmonalis; and, that, therefore, its mere presence, while suspicious, and always requiring to be accounted for, is not pathognomonic of lung tuberculosis, and only because pathognomonic when correlated to symptomatic phenomena or physical signs indicating lung infiltration.

I have personally come in contact with cases whose sputa showed Koch's bacilli, which cases, on that account, were regarded as unquestionably tubercular, the subsequent course and history, as well as the absolute absence of signs indicating lung infiltration, showing these subjects not to have had pulmonary tuberculosis at all.

Perhaps this phase of the subject will permit me to digress as to the relative value of the older methods and the bacteriological ones in the exclusion of pulmonary lesions, a phase of diagnosis of the greatest possible importance and value, and which we must employ daily in cases of which there is any obscurity whatever. It is rare, indeed, that cases present themselves, having even a suspicion of pulmonary disease that a positive decision as to the existence or non-existence of disease in the thorax cannot be affirmed or negated *at once* by a physical examination of the chest. I can believe that under exceptional circumstances, infiltration, tubercular in character, can be so placed, and outside the usual situations (perhaps centrally) that the symptoms suggesting the possibility of lung invasion may be present for some time before the physical signs of that implication are evident, but those cases must be excessively rare, and are then probably not elicited because of the inability of an individual examiner to find them. I have heard of cases presenting the symptoms of phthisis in which the physical signs of that malady, in its early stage, were not discoverable, but I have never seen one, and, therefore, can only express the views of others as to the impossibility of finding physical signs to correlate with the symptoms. I have, however, had many cases in which, after finding signs indicating slight lung consolidation, I have taken plenty of time and the thermometer, to decide whether these signs indicated an active lesion or not. It hardly seems rational to believe symptoms will be present without lesion, and it seems just as

rational that these alterations in tissue can be discovered if our knowledge and skill are only sufficient. Investigations of the sputa in many of these cases showing symptoms suggestive of tubercular lung lesions, in which the examination of the chest disclosed signs of slight lung infiltration, were entirely negative as far as the presence of bacilli were concerned. I have grown to believe, therefore, the tubercle bacillus is a late rather than an early physical sign of pulmonary tuberculosis, and in this view I am by no means alone. I cannot, therefore, do anything but emphatically deprecate the assumption of no tuberculosis when no bacilli are found. If I were not speaking simply of diagnosis, it might be well to emphasize the enormous gravity of a mistake in diagnosis, either for the disease when no disease existed, or against its presence when it was really in active existence.

In the exclusion of disease from the thorax because the physical signs obtained by the usual means are absent, the relative value of the older methods as compared with the bacteriologic ones is by far and away in favor of percussion and auscultation, and, besides, is the more quickly available, for we do not have to wait for sputa, and worry whether it has been properly secured, or whether it could possibly have become contaminated in any way. To my mind the actual exclusion of thoracic disease, at the immediate bedside, is best accomplished by the employment of the older methods of investigation. I do not at all wish to belittle the findings by the microscope in the diagnosis of tuberculosis of the lungs, but rather to precisionize the role it plays in the detection of that disease, and to deprecate with all the emphasis of which I am capable the exclusive reliance upon microscopic findings and the consequent neglect of the older methods to which such a course would ultimately and inevitably lead. There are too many cases not diagnosable by the 'scope, there are too many chances of error, and when we are diagnosing disease we might as well do it properly as the wrong way, and, besides, it must be evident that if one depends upon the microscope alone he will not diagnose a large number of cases that could readily be recognized by the older measures. If the time should ever come when the older methods should become obsolete, diagnosis will take a distinct and decisive step backward, and, while possibly we will not be quite so densely ignorant of pulmonary diseases as were those men who were compelled to practice medicine before the

discovery and application of percussion and auscultation, (and had the opportunity to be wrong in their diagnoses of pulmonary maladies more often than they were right), we will approximate to that stage of ignorance.

While I have said thus much in regard to the relative value of the older methods and the microscopic findings in what may be called "straight" cases of pulmonary tuberculosis, I want, in all justice and fairness, to say that the older methods have been strikingly augmented in value, in usefulness, and in precision of interpretation of signs, by the discovery of micro-organism by the microscope. I refer to a class of cases in which pulmonary consolidation is made out by the older methods, but the nature of the consolidation is in doubt, until, by the aid of the scope, we are able to demonstrate the presence of the tubercle bacillus or some other micro-organism. One has only to see a few "mixed" cases to realize what a wonderful boon to diagnosis this newer method is, and how readily and certainly bacteriological findings clear up a diagnosis. For instance, take a case of emphysema of the lungs, in which we suspect, from clinical symptoms, that the vesicular dilatation is complicated by tuberculosis; you can readily imagine that there may be no reliable physical signs found by the older means, or, if present, these signs may be obscure or referred to the emphysema itself, and hence signs, if found, may not be interpretable. Here the discovery of the tubercle bacillus in the sputum, correlated with the symptoms that made us suspicious of a coexisting tuberculosis, is sufficient for the diagnosis of that affection, but, most unfortunately, absence of bacillus does not exclude the disease. Take those lingering cases of what we at first thought were croupous pneumonia, where we have all the physical signs of that affection, the discovery of the tubercle bacillus, together, perhaps, with the micro-organisms of pneumonia, in most instances at once establishes the "mixed" character of the lesion and alters also the character of the treatment as well as the prognosis. Take, as a further example, those by no means infrequent cases of pulmonary hemorrhage occurring in the subjects of valvular heart disease. We suspect phthisis, for, as an actual clinical fact, these two affections are very frequently associated. Our examination of the chest discloses signs of consolidation. The question as to whether the consolidation we find is an infarct, a bronchio-pneumonia, a croupous pneumonia secondary to the

lesion, or a co-existing tuberculous lesion, may often be settled, when other diagnostic factors fail us, by the finding in the sputum of Koch's bacillus; and again with this discovery will the whole character of the treatment and the prognosis vary with the diagnosis. In point of fact, I am only too glad to confess that without the aid of microscopic findings, in a certain class of cases, accurate diagnosis is absolutely impossible. All the technical skill in physical diagnosis is vain, after a certain stage in the investigation is reached. Physical conditions are discoverable, but they are not interpretable without the microscope's aid.

Aside from the diagnostic significance of the tubercle bacillus, the prognostic value of that micro-organism in sputa is not so great as its diagnostic value, so far as my individual experience goes. Some authorities have declared that certain differences in length and width have some prognostic significance, but these opinions have not as yet been sufficiently investigated by the profession to have definite value, and these prognostic factors are hence still sub judice. If I find the tubercle bacillus alone, that is, not associated with streptococci or staphylococci, the prognosis seems to me better than when the case is a mixed one, so far as micro-organisms are concerned. Do not lay down your weapons of defense in despair because you find the tubercle bacillus present. Pure tuberculosis is more manageable than a mixed infection. As aids in prognosis the modifications to be observed in physical signs by the older methods are more to be relied upon than the microscopic findings. The unreliability of the micro-organism prognostically is well illustrated in the fact, already stated, that cases of phthisis pulmonalis are frequently discharged from sanitariums clinically cured of their malady, with the tubercle bacilli still present in their sputa.

Respecting the diagnosis of phthisis pulmonalis by the X-ray alone, I have to say that an examination of the chest by means of the fluoroscope is simply a method of inspection, and its findings require definition and interpretation by the older methods and sometimes also by the 'scope. Light areas are made out, dark areas are easily discoverable, and the movements of the diaphragm can be noted; but your percussion note and your auscultatory signs tell you what these dark or light areas mean. Therefore, as a special method of diagnosing phthisis pulmonalis in its early stage, the X-ray alone need not be seriously considered.

The diagnosis of the consolidation of phthisis pulmonalis by the spirometer are also beyond the pale of serious consideration. Diminished expansion, if discovered, must be interpreted by percussion and auscultation.

Concerning the value of injections of tuberculin for the diagnosis of pulmonary tuberculosis, I have no opinion to express as to its relative usefulness compared either with the older methods or the bacteriological findings, inasmuch as I have never personally employed that agent to diagnose lung tuberculosis, the phase of diagnosis with which I am alone concerned at this time.

My plea in this paper is that the older methods of chest diagnosis shall not be neglected for the possibly more fascinating yet less convincing ones of bacteriology. I am assured we can never do without percussion and auscultation no matter how profound our knowledge and skill with the microscope becomes. We should not sanction that growing spirit which perhaps unconsciously endeavors to arrogate certitude to its bacteriological findings, and which findings always need to be backed up by the ascertainments of the older methods in order to make the diagnosis reasonably tenable. My further plea is that the two methods, the old and the new, shall be correlated, as they should be, and one seldom used to the exclusion of the other, and if only one method is available, as in infancy, childhood, the unconscious, the unmanageable, the insane, in those too ill to expectorate, or in those who do not expectorate, the older method is preferable, and entirely to be relied upon. Please do not forget that we diagnosed phthisis pulmonalis with wonderful accuracy by the older methods long before Koch discovered the tubercle bacillus, and that there are many instances in which the diagnosis is so unequivocal that we have no need whatever to ascertain the findings by the microscope in order to be perfectly accurate in our diagnosis. I want most of all to protest against the man, who, having a patient presenting symptoms suggestive of lung tuberculosis, secures that patient's sputum, examines it, and finding tubercular bacillus, declares the case to be one of tuberculosis, or, not finding the bacillus, declares that no tuberculosis is present, and who is either too lazy or too incompetent to examine the chest by the older methods.

THE SURGICAL TREATMENT OF PROSTATIC HYPERTROPHY.

BY WILLIAM B. VAN LENNEP, A. M., M. D., PHILADELPHIA.

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It is only within the last fifteen years that the treatment of prostatic hypertrophy has begun to shake off the fetters of tradition, has come to disregard the dicta of genito-urinary authorities and has been falling into line with the other branches of exact surgery. Nearly two-thirds of this period has been devoted to experimentation with physiological atrophy of the gland by castration, or by ligature or division of the vasa deferentia and to the perfection and use of instruments for burning and cutting through prostatic obstructions by way of the normal or urethral outlet. It is then practically with the inception of the new century that radical and curative operations, more or less complete extirpations, may be said to have begun to be accurately practised and to have come into general or at least increasing favor.

The object of this paper will be to deal with the principles of and the indications for these operations rather than with the details of technique, operative and subsequent, and to briefly review the different measures at our disposal for the relief and cure of enlargements of the prostate and their results.

Of the palliative measures the time-honored catheter with the establishment of so-called "catheter life" merits first consideration, as it has in the past. The single or double-elbowed instrument of Mercier with the improvements in its manufacture, the full-curved, tunneled sound in careful hands, the "English" catheter with its stylet which can be drawn on to enable the tip to ride over an obstruction and, above all, the modern principles of sterilization and intelligent irrigation will always give the catheter a place. Its sphere however will never be the universal one it once held and is bound to become more and more restricted with the perfection and increasing safety of curative measures.

Every practitioner can bear testimony to the fact that under certain local conditions, with proper care, or perhaps on account of individual immunity, the catheter may not shorten a man's life or even distress him, but this is not the rule, and were we able to get accurate statistics from a large number of

cases, there is no doubt that the mortality would be found to equal if it does not exceed that following radical operations, to say nothing of the fact that the latter hold out the promise of a cure.

It is safe to say that the catheter is justifiable as the initial treatment when there is no difficulty in its introduction; when it produces no reaction, *i. e.*, "catheter fever" in any of its degrees or variations; when the patient has the leisure and intelligence to use it properly as regards manipulation and asepsis; in the absence of bladder catarrh or when this is promptly controlled. It will be readily seen that these premises will exclude all those who may be classed as "hospital patients," all active or busy men and all those who can not use it with ease and without doing harm. Right here, as in a host of other surgical conditions, the responsibility rests with the practitioner, for surgery offers certain well-established palliative and curative remedies which are the less dangerous the earlier they are applied.

The second palliative procedure is more or less permanent drainage, preferably after the perfected method of Hunter McGuire. Almost every surgeon can testify to the relief and oft-times the comfort obtained from this suprapubic urethra with its sinus on the principle of a coffee-pot spout, even lined by some with transplanted skin-flaps. The patient usually wears an inlying tube, but occasionally acquires a sphincter-like control and some power of ejection. In an emergency the operation may even be done under local anæsthesia. This is the rational evolution of the obsolete rectal puncture with its resulting chicken cloaca and bladder infection by gas or faeces and of the almost equally dangerous suprapubic puncture and inlying canula of Dittel with the urinary leakage around the tube and the consequent extravasation results. The practical joint in this suprapubic opening is that drainage, unlike that through the perineum, can be continued indefinitely and even though perineal drainage be "dependent," it does not empty the bladder any better and requires a catheter to do so at all.

The place of such an epicystotomy is in emergencies where catheterism is impossible; where this is increasingly difficult or pernicious and a radical operation is not deemed safe, or as a preliminary to the latter; for drainage and occasionally as a permanent urinary outlet.

The first one of the curative measures is the "Bottini operation" which may be said to aim at partial cure as contrasted with the radical extirpations. Such intra- or trans-urethral attack is the outcome of the ideas of Mercier and his contemporaries and followers, just as Bigelow's "litholapaxy" is the logical perfection of their crude attempts at lithotripsy. This galvano-caustic incision, whether to divide an obstructing bar, to lower the level of the prostatic urethra, or to induce the persistent and active retraction following a burn, owes its popularity to the untiring efforts of Bottini and the instrumental improvements made by Freudenberg and others. The operation has been given an extended trial and has won a place among our therapeutic resources, although to-day it appears to be giving way, as might be expected, to the wave of rational anatomical extirpation.

The charm of the Bottini operation is that there is no cutting, often no general anæsthetic, a short confinement and, in experienced hands, a low mortality. With an accurate knowledge of the character of the obstruction, best obtained of course with the cystoscope; with enlargements which are eminently central and particularly fibrous and therefore small, and with a capacious urethra, free from constrictions and associated disease, there is no doubt that the operation still has its sphere even though this be an increasingly restricted one. There are, of course, the dangers of complications that follow any urethral manipulation, such as epididymitis, cystic and other inflammations; of perforation of the bladder wall, just as in the clumsy use of the lithotrite—probably a more frequent accident with the cautery; and an occasional incontinence from injury to the voluntary sphincter. A certain number of cases have required a second or third operation and there is also a good proportion that are reported "improved" instead of "cured." It has been aptly said that "cutting" is the stone operation for the average surgeon, while "crushing" belongs rather to the one who has added to his skill a dexterity in genito-urinary work; the same is even more true of the Bottini operation which has greater limitations, greater dangers and more partial or complete failures. Besides every hamlet the world over has its prostatics most of whom must look to "home talent" for relief. Finally, and by no means to be overlooked, is the fact that many surgeons, most of them at

times, supplement this operation by a perineal or better by a suprapubic cystotomy, for more accurate palpation of the enlargement and guidance of the knife and for the very essential subsequent drainage. Once the bladder is opened there now seems little doubt that with rare exceptions an enucleation can be done just as well and that with the resulting prospects of a complete and permanent cure.

This brings us to the curative measures and the two avenues of operative approach for enucleation, the perineal and the suprapubic, and here I can not but feel that history is about to repeat itself. From the time of the incision of Celsus for *cutting on the grippe*, down through the generations of itinerant "stone cutters," the outcasts of the Hippocratic oath, to the eminently respectable lithotomists of the last century, perineal and usually lateral lithotomy was the operation of election. Only when the surgeon had failed by this route or occasionally for calculi known to be of unusual size and therefore of long standing, with their consequent pernicious effects, was recourse had to the *sectio alta*. The mortality as might be expected was almost prohibitive, with the technique then in vogue, but the last twenty years has seen the pendulum swing in the opposite direction, until with improved methods and, above all, with more general use, epicystotomy has become a recognized and a safe procedure. To-day, calculi, too large for removal through a median, perineal opening or not adapted to crushing, are at once attacked from above and the worse the coincident catarrh, the greater becomes the suprapubic indication, while the presence of prostatic obstruction makes this practically positive.

The evolution of prostatectomy has been much the same: first, the excisions or ablations of Dittel and others from below and of McGill and Belfield and their followers by the suprapubic route, then coming to the front; second, combined operations, high and low, with a view to present the gland in the perineum or from a mistaken idea of the necessity for dependent drainage. The dangers of the latter plan soon popularized the lower route and substituted for the upper opening a host of tractors (*desenclaveurs* the French call them), branched or single, of frames, crutches and retractors, until one is reminded of the "apparatus major" of the ancients.

As might be expected, perineal prostatectomy was rapidly

perfected along rational anatomical lines and to-day is carried out with one of two definite aims: complete enucleation, probably with partial or entire destruction of the prostatic urethra, or incomplete excision and enucleation combined, with a view to preserving the ducts and the sexual function—both claiming the latter result with varying frequency.

Although with their great majority of cases the perineal operations have a somewhat lower mortality, there are certain complications or sequelæ which must not be overlooked: urinary incontinence from overstretching or laceration of the membranous urethra; opening into or sloughing of the rectum with recto-vesical, recto-urethral or urinary and fæcal perineal fistula—accidents and results which have occurred in the best of hands; occasional difficulty in the control of hæmorrhage and subsequent stricture. To these should be added such limitations as a deep perineum and inaccessible enlargements and perhaps the time required for the work and the anæsthetic necessary for the same reason—ether or chloroform instead of nitrous oxide gas.

Watson's statement that two-thirds of all enlarged prostates can be reached through the perineum is probably still correct, while his assertion that the balance should be relegated to the suprapubic route, but that an exploratory perineal cystotomy should be a preliminary to every proposed radical operation is practically the position that was formerly accorded to suprapubic lithotomy.

Without discussing the question of actual priority, credit is undoubtedly due Freyer for giving the high operation an equal if not the foremost place. Judging from published cases fully 99 per cent. of hypertrophied prostates can be enucleated through this opening and that more thoroughly, more easily and more quickly; with fewer complications, better drainage and as good if not better after results.

The principal question in deciding on any operation in these cases is the renal function and this often calls for drainage, either alone or as a preliminary step. Aside from this the larger the overgrowth and the worse the catarrh, the stronger the indication for epicystotomy. It is just those huge, glandular, "loose" prostates that can most readily be peeled out of their enveloping plexus of veins. The dense, fibrous, adherent enlargements or obstructions can also be removed as well from

above, but of course this must be done piece-meal—by morcellement—or hæmorrhage and even infiltration might result. One has only to do both operations to be impressed with the fact that the prostate is an intravesical organ and becomes more and more so as it enlarges. Given, however, a case in which suprapubic removal is found impossible the operator can still fall back on a perineal incision through which to reach the prostate without opening the urethra, or on the galvano-cautery division of the obstruction. Judging from personal experience, the writer is inclined to confine perineal prostatectomy to those small, hard, adherent prostates in thin subjects with a shallow perineum and little or no catarrh, giving the routine preference in all operative attack to epicystotomy. Again, judging not only from personal experience, but also from observation of the work of others, beginners with the operation in particular, the writer is convinced that epicystotomy is the procedure best adapted for the average surgeon the country over.

PROSTATECTOMY WITH SPINAL ANÆSTHESIA.

BY EDGAR R. BRYANT, A. M., M. D., SAN FRANCISCO, CALIFORNIA.

AFTER using spinal anæsthesia about four hundred times during a period of one and a-half years, I feel that I can speak with some authority as to its uses, limitations and dangers. The constant use of this form of analgesia, and in comparison with ether and chloroform narcosis, its simplicity, ease of application and practically absence of danger has caused me to conclude that spinal anæsthesia is safer in all cases than any other form of general anæsthesia. Unfortunately, it is of doubtful use for operations about the head and neck, but occasionally in special cases work may be done in these regions without pain under spinal anæsthesia.

I prefer dry crystals of tropo-cocaine sterilized by bringing it to a temperature of 235° F., and maintaining it at that temperature for fifteen minutes.

By giving two grains between the second and third lumbar, and by placing the patient in the Trendelenberg position for thirty minutes, I was recently able to exarticulate the lower

jaw of a patient at the City and County Hospital. This severe operation was performed with scarcely a murmur from the patient. This is the best that I have been able to do about the head with spinal anæsthesia, but I confidently expect to find some means of perfecting this form of analgesia for the entire body.

One grain of cocaine, properly prepared and carefully injected, will suffice for almost any operation upon the lower extremities and lower portions of the back and abdomen, up to a line irregularly placed between the umbilicus and the axilla.

When a portion of the body beyond the ordinary limits of cocaine is to be operated upon, much less chloroform or ether will be necessary if a preliminary injection of cocaine is made.

For inguinal or femoral herniotomies, or for operations upon the rectum, bladder, urethra and male generative organs, no one can use spinal anæsthesia without becoming very enthusiastic in its praise. Small amounts, such as one-half or three-fourths of a grain, are often sufficient for quite extensive operations upon these organs. If the point of puncture is frozen with the ethel chloride spray, and if the insertion of a sharp needle is made quickly, the entire procedure may be accomplished in an absolutely painless manner. I have been particularly fortunate in this respect in private cases where I use my own needle.

The needles used are made from number nineteen steel wire tubing, and are about three inches long.

The puncture may be made anywhere between the second lumbar vertebra and the sacrum.

A line extending from one crest of the ilium to the other usually crosses the space between the third and fourth lumbar spines. A little depression below this line, the space between the fourth and fifth lumbar spines, is a favorite point for puncture for this class of operations.

If one grain of cocaine is used, no change in the pulse or the respiration will be noted, and symptoms of shock are very rare. I have given one grain scores of times to feeble old men, with no more ill effect than from that much water; and it is only when I give from one grain and a-half up to two grains, as I often do, that I observe symptoms of shock. Two grains rarely produce shock in a robust man or woman, and it is only the feeble or aged that react unfavorably.

It is desirable to use enough cocaine to render operative procedures painless; but, on account of the quality of the drug, the desired effect may at times not be obtained without producing symptoms of shock.

I have found it a safe procedure to inject one grain of cocaine, and if at the end of fifteen or twenty minutes the results are not what is desired, to inject another grain. This seldom causes untoward symptoms, whereas two grains given at once may cause shock.

In the great majority of cases for operation upon these regions one grain of cocaine is injected low, and the patient will be anesthetized before the nurses have time to prepare him for the operation.

A knowledge of the limitations of cocaine, the recognition of the onset of the symptoms of shock, and the ability to combat them, are as necessary for success in cocaine anæsthesia as a similar knowledge of the drugs used and a knowledge of their dangers and treatment is necessary for general anæsthesia.

I have averaged nineteen spinal anæsthesias each month this year, and in Dr. Morton's section of the City and County Hospital about the same number are given. Nearly all the assistants and internes connected with the hospital give this form of anæsthesia at times; hence I have access to the results of from forty to fifty spinal anæsthesias each month. At my request, the nurses in charge of the operating rooms of the City and County Hospital, where all the operations in the hospital are performed, have given me this written statement of the effects of cocaine anæsthesia on the great number of cases that come under their observation:

"The cases given cocaine anæsthesia that have come directly under our notice have in nearly every instance been perfectly satisfactory. Patients pass through the operations with little or no indications of shock. Very old people, alcoholics, and those of a nervous or hysterical tendency at times show symptoms of disturbance, as a weak pulse, which may be accelerated or retarded, accompanied by a cold, profuse sweat. These patients respond readily to treatment with whiskey, strychnia, atropia, or adrenaline chloride. No cases have resulted fatally."

It is of importance to recognize the symptoms of shock early,

as they can be promptly arrested if appropriate remedies are applied. These symptoms are sighing, restlessness, anxiety, and moisture of the hands and face. The pulse soon becomes weak, at times accelerated, but often reduced in frequency. The first of these symptoms appearing, stimulants should be given. If the shock is more intense or if these symptoms have been overlooked, the face will become drawn, the pulse weaker, and respiration weak and shallow.

The most severe symptom observed was that of complete collapse, the patient being unconscious and cyanotic. Pulse and respiration were scarcely discernible.

Relaxation of the sphincter ani muscle, with involuntary passages of fæces, occurs; but no involuntary urination has been observed.

My experience has convinced me that only the first symptoms of shock need be present in any case receiving two grains or less of tropo-cocaine.

Before giving the injection I always have three hypodermics, each filled with one of the following solutions: One of atropine, one of strychnine, and one of adrenaline chloride, ready for instant use. When shock comes it makes its appearance suddenly, and can be inhibited promptly with an injection of one or all of the preceding drugs. Whiskey internally and saline infusions, and inhalations of amyl nitrite and oxygen may be useful. Although the shock may be profound, the recovery is rapid and the patient leaves the table absolutely free from all disagreeable symptoms.

Spinal anæsthesia seems to have no effect upon the gastrointestinal tract, as food given before or after the injection produces no unpleasant symptoms.

My first operations of prostatectomy under spinal anæsthesia were by the perineal route, and were performed without the aid of retractors or supra-pubic counterpressure.

Dr. Goodfellow's reputation led me to read his description of the operation carefully and to perform my first operation according to his method. Other descriptions of operations similarly performed were followed, but none were satisfactory. I felt the need of retraction or counterpressure.

Bryson's method of pressure through the incised bladder did not appeal to me, as I considered that one opening should suffice for the removal of the gland.

The first retractor secured was Symes, but the hospital internes demonstrated its use so frequently that the rod perforated the hollow rubber ball at my first attempt to use it.

Lydston's prostatic tractor was next sought and one was ordered, but before it was delivered I read of Young's retractor. I countermanded the order for the former and purchased the latter. With Young's method and instruments, I thought perfection had been attained in the removal of the prostate gland.

I used the inverted U and V-shaped incisions, but finally found that the median incision met all the requirements, even to incising the capsule on each side of the center line and the enucleation of the gland as recommended by Young.

The perineal opening into the bladder is made upon a urethral staff which is grooved posteriorly. No matter which form of incision is chosen, the final entrance into the bladder is usually made by the guide of this staff. Thrice I have made this incision without the aid of the staff, obstructions of the urethra prohibiting. In such cases a full bladder insures opening it with the first thrust of the knife.

Through the perineal opening, the closed Young's retractor is inserted into the bladder, and then the blades are separated and the screw tightened. With this instrument the hypertrophied gland can be brought sufficiently close to the external wound so that the incisions and removal of the gland can be accomplished with the aid of vision. By means of scissors, forceps and the fingers, the gland can quickly and safely be removed.

This efficient retractor renders this otherwise formidable and difficult operation simple and uncomplicated.

I consider this method of operating preferable to any other for one not familiar with operations on the prostate gland.

Convalescence was rapid in all cases, and the after-treatment became more simple with succeeding cases.

The perineal opening was packed with iodoform gauze about a soft rubber tube which prevented hæmorrhage, and afforded excellent drainage of the bladder.

Young's advice to give an abundance of water by the mouth and to avoid instrumentation, and Goodfellow's three negatives—no catheter, no irrigation and no instruments—are excellent principles for after-treatment. It is hard to resist the

temptation to pass a sound or two at the end of two weeks or to wash the bladder with a boric acid solution, but it is not necessary.

Having exploited the perineal route to my satisfaction, like Alexander I sighed for other worlds to conquer.

I was not satisfied to confine myself to the perineal route while others were acclaiming the merits of the supra-pubic operation.

As Moynihan's writings always appeal to me, I performed my first supra-pubic operation strictly according to his method or his modification of Freyer's or of Fuller's operation. The operation was so simple and so easy to perform and the results so satisfactory that I have become more enthusiastic over the supra-pubic operation than I was over Young's perineal method.

The bladder is thoroughly irrigated with a one per cent. carbolic solution, and finally filled with this fluid. The catheter remains in situ connected with the irrigator, and the flow is cut off when the bladder is sufficiently distended. The skin incision is made over the full bladder close to the symphysis pubis, and the viscus is reached by blunt dissection, care being taken to push the reflection of the peritoneum out of the way. The bladder is held by hooks or silk threads inserted on each side of the center, and a small incision is made between them into the viscus with a sharp knife, and the opening carefully distended. A silkworm gut thread is inserted through each side of the superior portion of the opening in the bladder and through all the structures of the abdominal wall. This prevents the bladder from slipping away and prevents tearing into the abdominal cavity during the subsequent maneuvers. These sutures are allowed to remain for three days, and are then removed. The enlarged prostate and the internal urethra are palpated; the catheter being in position, it assists in locating the situation of the latter. Stones or foreign bodies can now be readily removed. An assistant elevates the gland by pressure in the rectum, and the operator grasps the mucous membrane of the bladder over the prostate posterior to the urethra with a Volsella forceps. The mucous membrane in this situation is incised, and the incision enlarged with the fingers preparatory to removing the prostate urethra with the gland, according to Moynihan.

Lilienthal incises the capsule of the gland as well as the mucous membrane of the bladder, and enucleates the gland, leaving the urethra intact. Whichever method is followed, the operator cannot be but impressed with the ease and facility with which the gland between the index finger of the left hand in the bladder wound and the index finger of the right gloved hand in the rectum can be enucleated.

Lilienthal warns the operator not to damage the urethra or the ejaculatory ducts. Moynihan, however, purposely removes gland, urethra, ducts and all, claiming that necrosis of the urethra from deficiency of the arterial supply follows when the urethra is not removed.

I prefer the method recommended by Lilienthal, and endeavor to preserve the urethra and ejaculatory ducts in performing supra-pubic prostatectomies. If necrosis of the urethra follows, the results will be practically the same as removing it at the time of operating.

During the operation, and particularly afterward, the bladder is flushed, and hæmorrhage checked by unclaspings the tube of the irrigator and allowing the hot carbolic solution to flow through the catheter into the viscus. After hæmorrhage ceases the catheter is removed.

William Thompson attaches an oval piece of red rubber one-sixth of an inch thick, one and a-half inches wide, and two inches long, to a catheter. Tension upon the catheter presses the rubber pad against the prostatic wound and checks the hæmorrhage.

The after-treatment will depend upon the condition of the patient.

E. H. Pratt's recommendation that two tubes, one long enough to reach a receptacle under the bed, and the other short, be inserted into the supra-pubic bladder wound for the purpose of drainage and of flushing the bladder, meets the requirements perfectly.

The wound is closed excepting the space for the tubes. The bladder is washed daily through these tubes with a one per cent. hot carbolic solution. The tubes are removed and the bladder is thoroughly flushed with the same solution in forty-eight hours and the patient allowed to sit up in bed. The tubes are re-inserted and daily flushing continued.

Moynihan inserts a catheter on the fourth and on each succeeding day, and continues to flush the bladder.

The catheter can be tied in on the seventh day, and kept in position for five or six days, when it is removed and a new one introduced.

The permanent catheter may be dispensed with. In some cases catheterization is unnecessary. But the supra-pubic wound heals quicker if the urine can escape from the urethra. This wound usually heals in from three to five weeks, and micturition becomes normal.

The operation may be performed in two stages.

The supra-pubic incision will relieve the pressure of a distended bladder in case of a non-penetrable urethra, and the hypertrophied gland can be readily removed through the same incision when the patient recovers his strength.

In supra-pubic prostatectomy no important vessels or nerves are severed, the urethra need not be injured, and there is no danger of tearing into the rectum.

FRACTURE OF THE VERTEBRAL COLUMN COMPLICATED BY PREGNANCY.

BY H. L. NORTHROP, M. D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of Pennsylvania, September, 1905.)

No fracture of any part of the skeleton can equal for severity of symptoms, for number of complications, or for high mortality, and no fracture defies treatment so potently or with like obstinacy, as a fracture of the bony axis of the skeleton. Much of this is to be explained, of course, by the associated and irreparable damage done at the moment of the injury to the vital nerve centres and nerve fibres constituting the spinal cord. The seriousness of this kind of injury, the ease and frequency with which the spinal cord is so severely damaged, is to be further explained by the architecture of the vertebral column.

The bodies, or centra, of the vertebræ consist of a delicate, light-weight cancellated structure, enveloped by a very thin layer of compact bone, a material which is easily crushed; the arches and processes, united together at many and various angles (contributing a source of weakness) are thereby ineffective when called upon to resist any special pressure or blow from without, and, like the "wishbone" in the hands of the

child, snap asunder and perhaps penetrate the contents of the neural canal. Moreover, it should not be forgotten that the cord consists of bundles of fibres and supplies peripheral areas which do not and cannot receive their innervation from any other source.

Let us turn for a moment to the skull, to note the effect of a blow upon the cranial wall, and let it be a hard one. Because of the arches of the cranial vault the force of a blow received at one point is scattered and may be spent upon parts remote. The result, in many cases, is an extensive, or, at least, a pronounced fracture of the skull wall, perhaps at the point of impact, perhaps at a point opposite to it. This fracture may be extensive enough to permit the rent in the skull wall to be more or less freely opened or closed by the operator, as he would open or pry apart the two shells of an oyster or a clam. But the patient makes a prompt and complete recovery, without paralysis, either motor or sensory, because the contents of the cranial cavity have either suffered no permanent harm, or, if the cortex has been lacerated, the conduction paths are untouched. The violence received has been sufficient to seriously disturb the integrity of the skull wall, but the curves and arches of the calvarium have had a potent effect in distributing and scattering the force of the blow, hence its full effect was not concentrated at a single point.

Suppose, however, that the gray cortex has been lacerated. What is the result? A large number of nerve cells suffer from the traumatism, and, perhaps, also many fibres are divided, but no motor or sensory disturbance of any appreciable degree follows. This is because associated fibres and cells intimately related by anatomical contiguity, if not by continuity, to those destroyed, take up their function, and the nerve impulses are transmitted as before.

How different the result when the conduction fibres of the cord are involved and their continuity is interfered with.

It is by such a comparison as this of the architecture of skull and vertebral column that we can satisfactorily explain the widely differing results of a fracture of different parts of the cranio-vertebral axis, and the much more disastrous results attending a fracture of its vertebral division.

A glance at the skeleton shows that the weakest part of the column is at the junction of the thoracic and lumbar sections, including the last two thoracic and first two lumbar segments.

It is so because it has to bear nearly as much weight as the part of the column below it, and its vertebræ are relatively small; it forms the most concave part of the dorso-lumbar curve known as the "hollow of the back," and the circumference of the trunk is less here, at "the waist," than elsewhere. Again, it is near the middle of the column, so that greater leverage can be brought to bear upon it than upon any other part. Finally, the segments of the column immediately above it are for the most part fixed, hence a greater area or extent of body surface is moved upon the dorso-lumbar junction, which, because of the fixity of the segments above, possesses and requires greater mobility. It is here that fatigue and the prodromal aching of a fever are first felt.

We see several reasons for regarding the junction of the thoracic and lumbar sections of the column as its weakest point, and would naturally expect fracture to occur here more frequently than elsewhere, and so it does.

Fortunately, fractures of the vertebral column are comparatively rare. They constitute about 3 per cent. of all fractures, and occur more frequently in adult males, for occupational reasons, than in women or children.

The fracture is associated with a dislocation of the vertebral body in 60 per cent. of all cases, only 1-5 of the cases being a fracture alone, and about the same number a dislocation alone. Hence, the propriety of referring to the majority of these cases as "fracture-dislocations." The violence which is sufficient to fracture the arch or crush the vertebral body is usually sufficient also to forcibly dislocate the vertebræ, or to produce enough hyper-extension or forced flexion to do it.

Fractures of the cervical vertebræ occur with about equal frequency with fractures of the thoracic; fractures of the lumbar vertebræ are rare. The vertebræ most commonly fractured are the 5th and 6th cervical, the 12th thoracic and the 1st lumbar. Of these the cervical fractures are attended by the highest mortality.

Fracture-dislocations are produced by both direct and indirect violence. An example of the latter is when a fracture of the vertebral column occurs from a blow upon the head, made by a falling object, or by striking the head against a bridge or an archway, while riding or driving under.

A common cause of fracture of the spine is forced flexion, a blow upon the head forcing the head forward upon the chest,

or the chest upon the pelvis. When the violence is direct the degree of injury inflicted depends largely upon its force, whether the result is merely a fracture of the arch, or this combined with a dislocation or a crush of the vertebral body.

The symptoms of vertebral fracture are shock, usually quite pronounced; pain, more particularly when being moved, and referred to the back (seat of injury;) swelling, fluctuation, ecchymosis and quite frequently abnormal mobility and crepitus are also present. The local symptoms, let it be understood, may be insignificant, indefinite or absent entirely, but the fracture-dislocation may be there, its presence not disclosed by any local surface manifestations.

As to the exact location of the cord lesion, an accurate knowledge of the distribution of the spinal nerves must be brought into play. The motor supply must be investigated carefully, and the sensory distribution must be traced most accurately.

A complete anatomical description of this is, of course, beyond the limits of my paper. Let it suffice to say that fracture of the lower end of the cervical column will involve the ulnar nerve, which supplies the majority of the intrinsic muscles of the hand and whose sensory distribution is well known. If the injury is above the 6th cervical vertebra, the entire upper extremity will be anæsthetic except the outer side of the arm and forearm and the radial side of the thumb.

A lesion of the cord at the level of the 4th or 5th cervical vertebra involves the origin of the phrenic nerve. The diaphragm will be paralyzed and death will occur in a few hours.

Injuries of the thoracic vertebræ are more easily diagnosed because of the simple distribution of the intercostal nerves, and are to be located by the area of anæsthesia, more particularly, which extends in a general way to the level of the bony and the central lesions. The integument surrounding the umbilicus is supplied by the 10th thoracic nerve.

The spinal cord ends at the upper border of the 2d lumbar vertebra. An injury below this involves, of course, the cauda equina, and there will be partial or complete paralysis of the lower extremities.

The prognosis is usually the worst possible. The higher the lesion the graver the outlook. If the injury is to the cervical section, shock is greater and the result is apt to be quickly fatal. The cases which recover from the immediate effects

live for six months to two years, and die from the usual and ultimately unavoidable complications, viz., general exhaustion, muscular wasting, bed sores. If the fracture is in the thoracic area cystitis and pyelitis are more frequent, if in the upper thoracic or lower cervical region traumatic and hypostatic pneumonia are prone to develop early.

As to treatment, operation is indicated in all cases where the spinal injury is the only serious one and the shock is not too profound. It is demanded in all cases of partial lesion, as where the neural arch only is fractured; and in all injuries involving the cauda equina. It consists of a laminectomy, *i. e.*, a removal of at least the fractured arch or arches, and the further removal of blood clot or anything else that is causing pressure on the contents of the neural canal.

The after-treatment must include the use of a water bed and all possible resources for the prevention of bed sores, cystitis, pneumonia, etc.

Three cases of vertebral fracture have come under my care during the past ten months. I wish to describe and report one of these, the most interesting and instructive, because the patient was six months pregnant.

Mrs. L., age 35, was carrying her two-year-old child in her arms on last Good Friday afternoon, when a severe wind storm arose and blew over a large bill board, which struck Mrs. L. on the back. She fell with the child beneath her, but the latter was unharmed. Mrs. L. was taken to Hahnemann Hospital, profoundly shocked, and an examination showed complete paralysis of both lower extremities, the surface anæsthesia reaching as high as the iliac crests. At the dorso-lumbar junction there was a broad fluctuating hæmatoma, while an ecchymosis around both eyes began to appear when she was admitted, and soon became an extensive bilateral extravasation. But there had been no injury, not even a bruise, to the head, and her mental condition was unimpaired. This bilateral ecchymosis beneath the eyelids is usually indicative of a fracture at the base of the skull, which was not present in this case, however, and the only way to explain the symmetrical hæmorrhage into the orbital cavities is by recognizing the unbroken continuity of the subarachnoid space around both cord and brain, and the possibility of a large extravasation of blood into this space finding its way from around the cord through the foramen magnum into the cisterna magna of the

arachnoid system, thence through the sphenoidal fissure into the fat and connective tissue of the orbit. And I am convinced that this is just what happened.

Mrs. L. was six months pregnant.

Under ether I made a longitudinal incision down through the hematoma, revealing a fracture of the 12th thoracic and 1st lumbar arches, and a complete separation between the bodies of these same vertebræ. Removing the broken arches I found a very extensive hemorrhage into the neural canal, while the spinal cord was flattened and tightly drawn across the bodies of the dislocated vertebræ. In order to overcome this displacement I made traction upon both lower extremities, when a large volume of blood poured, apparently, from the abdominal cavity, making me fear at first that the inferior cava had been lacerated. The hemorrhage probably came from a lumbar vein close to its junction with the cava.

Gauze pressure was employed to control the hemorrhage (the traction also had to be relinquished) and Mrs. L. recovered nicely from the shock of the accident and operation.

Much speculation was now indulged in as to what would become of the contents of the uterus and several expressed the view that because of the traumatism to the cord the uterus could not empty itself, and if emptied the uterine muscle could not contract. However, eight days after the accident expulsive pains set in, lasted for eighteen hours, and the uterus emptied itself completely of a dead, decomposing fœtus. There was no hemorrhage and non-puerperal sepsis.

Mrs. L. is still living, permanently paralyzed from iliac crests down.

The explanation of the possibility of this quite normal miscarriage is to be found in the nerve supply to the uterus, which is very largely through the sympathetic nervous system, and but slightly from the spinal cord. The uterus receives nerves chiefly from a plexus placed in the neighborhood of the cervix, to which the name cervical ganglion or, better, the plexus utero-vaginalis is given. This plexus is continuous with the hypogastric plexus, both belonging to the sympathetic system. The uterus also receives fibres directly from the hypogastric plexus through the utero-sacral ligaments, and, finally, a few fibres from the third and fourth sacral nerves, derived from the spinal cord.

I do not know of any other case of fracture of the vertebræ

occurring during pregnancy having been reported, and for this reason, and because of several unique features coexisting, I feel that my report deserves a corner in the transactions of this Society.

PENETRATING WOUNDS OF THE EYE.

BY WILLIAM W. SPEAKMAN, M. D., PHILADELPHIA.

(Read before the Pennsylvania State Homoeopathic Medical Society, Altoona, September, 1905.)

I FEEL I have the customary apology to make, in attempting to present in a single brief paper, so large and important a subject as "Penetrating Wounds of the Eye," and in doing so, I shall make no attempt at exhaustive treatment, believing that the value of any paper lies in the clear presentation of a few plainly stated facts. You all know that we rarely see *just* the bedside conditions, in practice that are described in text-books. and seldom do we see in the reality, precisely the picture portrayed in an illustration. These variations, unless we have had wide personal opportunities for observation may lead us far astray, therefore to cite individual cases and appearances can be of little avail.

Penetrating wounds of the eye are of comparatively frequent occurrence. Not alone in factory and shop but anywhere and everywhere in so many diverse and curious ways that it would likewise be unnecessary to enumerate them.

That they come always in the nature of emergencies and that the nearest available doctor, irrespective of his knowledge or special experience, is usually the first to see them is my real reason for presenting the subject, and for this I make no apology. On this first observer and what he does, and *how quickly* often depends the ultimate outcome. Hence one of two things is most essential, *either* that he know his business or realize and that quickly his professional limitations and his moral obligations to the patient. It is the twenty-four-hour interval immediately following accident that is the golden opportunity, and this time lost, in uncertain and vacillating delay, can frequently never be regained. Inflammatory changes, exudates and opacification of the transparent media, may make

impossible a diagnosis that would have been clear twelve or twenty-four hours previous.

True as this is in relation to diagnosis it is even more important in operative interference, and operation is often robbed of all possibility of success, by the lapse of a few days. I make the plea for early and correct diagnosis and treatment strong, because, too often the specialist sees the case when all the chances of treatment are gone, and he is obliged with closed lips to accept conditions as he finds them or to stultify himself to protect his fellow-practitioner and endorse his past treatment to save him from a law suit in the future.

If doubt and uncertainty, due to lack of experience linger in your mind, then for God's sake and the future comfort of your conscience get assistance. That is the first point.

If assistance be unobtainable the next step is, cocaine sterilized, four per cent. cocaine, first of all, first because cocaine renders anæsthetic the eye and relieves to a large extent the blepharo spasm, accompanying injuries to the ball.

And second though of greater importance. Because we must cleanse this eye, brow, and cilia, with soap and water, and soap and water we can not use without first rendering anæsthetic the eyeball.

In ophthalmology we must get our union by first intention if at all. We never have corneal flaps heal by granulation, and not only must the hands of the surgeon be scrubbed, but the brow, lids, cilia, and the conjunctival fold must receive thorough disinfection, before we attempt instrumentation of any kind. This may sound trite, and an insult to your intelligence, but occasionally the very urgency of the case, a sudden penetrating wound, a nervous patient and sympathetic friends, may induce one to start before he is fully equipped with good light and proper appliances to make a thorough and careful examination. We may have here opened a normally closed cavity, and we ourselves, through undue haste may introduce the infection we are seeking to avoid. As soon gentlemen think of sticking our unwashed hands into the peritoneal cavity as to replace a prolapsed iris without proper disinfection with unsterilized instruments, which should come immediately from boiling water to the field of operation. I make this plea strong also. Time may be lost by attempted treatment with imperfect knowledge but not in efforts in the direction of disinfection.

The nature of the wound may be such as to preclude the use of the ophthalmoscope, owing to extravasation of blood in the anterior chamber or in the vitreous, but where it will be of service we should after dilating the pupil, so far as is possible, avail ourselves of this aid.

What we shall find of probably more service is the bi-convex lens with which we bring strong illumination to bear on the injured part.

The next step in treatment after any operative interference that may be found necessary, is cold applied directly to the closed lids. This may be accomplished either by means of the ice bag or by moist compresses, taken directly from a lump of ice and changed sufficiently often to be kept cold, and the patient should be kept at rest in bed.

Too many cases of penetrating wounds are allowed to be up and around, with the consequence that they cannot follow out the treatment and will be constantly tempted to use the sound eye.

As a general rule, cases which from the nature and extent of the injury do not call for immediate removal of the eye, require the use of atropine to place the ciliary muscle at rest and draw the iris back into the iritic angle, and away from the lens should it be injured in any way. The atropine is best used in solution, four grains to the ounce of distilled water, and should be boiled previous to instillation. Occasionally if the wound be at the base of the iris or near the periphery of the cornea, with possibly a prolapse of the iris (eserine Sulphate) two grains to the ounce may be preferable.

Wounds of the cornea.—Penetrating wounds of the cornea that do not injure the iris or lens and are made by a smooth, clean instrument leaving behind no foreign substance though rare are usually fortunate in their outcome. Such wounds may be made by a knife point, needle or scissor point. More usually any impact sufficient to penetrate so hard a substance as the cornea passes on to do damage to the underlying tissues—the iris, lens and vitreous. Prolapse of the iris may occur in such if the escape of aqueous following the penetration come with a rush. Such a prolapse will appear as a dark object lying on the wound aperture. If seen immediately following the injury and if the iris be not lacerated or torn, gentle efforts may be made at reduction. If, however, exudates or adhesions

have formed, or should the iris be lacerated, it will be advisable to remove the protuding part with forceps and scissors. Injury to the crystalline lens is one of the most serious complications in ophthalmic surgery, for penetration of its capsule, allowing the aqueous to come in contact with the lens leads immediately to great swelling of its fibres, with opacity. The rapid increase in bulk of the lens may lead to increase in the intra ocular tension and the establishment of an acute traumatic glaucoma. This may call for frequent paracentesis of the aqueous, or even removal of the lens itself.

Wounds Penetrating the Vitreous, are of still more serious import as infection and loss of the ball are the usual consequence. Should the sclero be penetrated we may, if conditions be favorable, that is—the wound clear cut and recent, and the presence of any foreign matter be pretty well excluded, suture the edges, being extremely careful to make no pressure on the eyeball and thus cause a prolapse of the vitreous. Wounds occurring in the ciliary region are especially dangerous, so much so that this has come to be known as the Danger Zone. Penetration by small particles which remain in the eye will call for special procedure in each case.

Particles of iron or steel may sometimes be removed by the use of the magnet if favorably located for its use and particularly if they can be seen in the anterior chamber or in the iris, but removal by the magnet is not the easy and simple procedure that we might suppose it to be. Nevertheless the magnet has prevented many mutilating and disfiguring iridec-tomies.

Removal of foreign bodies from the vitreous is a hazardous and usually an unsuccessful procedure. Penetrating wounds with or without the presence of a foreign body that are sufficient in extent and character to render an eye not only useless but to render it liable to certain infection, should be met by enucleation, and where after expectant treatment, it is evident that a pan ophthalmitis will ensue, we must resort to the same procedure to save prolonged and useless suffering to the patient and for the safety of the second eye. To conclude, I will say that penetrating wounds from the variation in their character and extent, offer the widest opportunities for diagnosis, and finest distinctions of judgment in their management.

No set rule and no set of rules can be formulated to guide us

in the management of each and every case. Ophthalmic surgery is not as many apparently believe to be learned alone from text-books, but from long and varied practical experience and brave indeed to the point of folly, is the man who undertakes the management of a penetrating wound of the eye with the self-consciousness of uncertainty, bred by lack of opportunity and experience.

PETROLEUM: A PRACTICAL STUDY.

BY P. W. SHEDD, M. D., NEW YORK.

IN beginning a practical study of petroleum there may be cited a provocative statement of the venerable Hempel which it would be of scientific interest to see refuted or corroborated.

He says, "We have recommended petroleum for sea-sickness because the curative adaptation of the oil for this exceedingly troublesome malady has become an article of orthodox faith in the homœopathic school. We are satisfied from our own, as well as from the experience of a number of other practitioners, that the virtues of petroleum in sea-sickness are all moonshine. We therefore do not hesitate to make this statement, having no other motive in doing so than that of subserving the truth."

It is, naturally, to be understood that petroleum was prescribed in a case of petroleum sea-sickness, *i. e.*, not in an apomorphine, a cocculus, a nux vomica, a tabacum case.

Hahnemann's own summary of the drug is significant of its rather limited range. It evidences little direct neural action and even in its own sphere: the gastro-intestinal tract, mucous membranes and skin, has so many greater competitors in drug therapy that possibly when clearly indicated it is, from ignorance, not prescribed. Hahnemann deduces from the pathogenesis its usefulness in a disease syndrome where a number of the following elements are present:

Mind.—Excitable disposition. Scolding. Apprehensiveness.

Head and Face.—Vertigo. Confusion in the head. Loss of memory. Pressive sticking headache. Throbbing in the occiput. Falling out of the hair. Eruption on scalp and nape.

Scabs, crusts on the scalp. Vesicles on the nape. Yellow face.

Eyes.—Mist before the eyes.

Ears.—Humming and buzzing in the ears.

Rumbling in the ears. Ringing in the ears. Deafness, especially after the use of nitric acid. Dryness and troublesome sensation of dryness of the inner ear.

Nose.—Nasal dryness often very troublesome. Stoppage of the nose.

Glands.—Swollen submaxillaries.

Digestive Tract.—White tongue. Loud eructations. Desire to vomit. Anorexia. Bulimia. Aversion to meat. Sensation of emptiness in abdomen. Abdominal colic. Hard stool. Frequent stools during the day (*diarrheic*).

Genito-urinary Tract.—Involuntary micturition (chronic). Stricture. Burning in the urethra. Itching and moisture of scrotum. Frequent pollutions.

Respiratory Tract.—Hoarseness, Coryza. Cough in the evening after lying down. Dry night cough. Sticking in the sides of the chest.

Back.—Sacral pains, not allowing the patient to stand. Pain in the back.

Limbs.—Rhagadic skin of the hands and fingers in winter, with bloody cracks. Stiff, gouty finger joints. Tearing in the hands. Brown spots upon the wrist. Cracking and stiffness of the articulations. Limbs go to sleep.

Skin.—Herpes on the chest. Proud flesh in ulcers.

Circulatory.—Ebullitions of blood.

Fever.—Evening intermittent fever. Chill, then heat of the face, with cold feet. Night sweats.

Sleep.—Vivid dreams. Wakes, not slept out yet.

Modalities.—Aversion to the open air.

A study of the above will show one great point of attack with petroleum: *the skin*, external or internal, epiderm or mucosa; epiderm with rhagadic eczema; mucosa congested and with mucous secretions. Given in low trituration it might also be considered as a tissue-food, causing constructive tissue metamorphosis through its hydrocarbons.

This complex rock-oil hydrocarbon has an extended pathogenesis, but clinically is not used as are the carbons, graphites, *carbo vegetabilis*, *carbo animalis*, and many digestive conditions doubtless calling for it are not recognized from ignorance of its real value.

In pathogenesis and clinical use it is to be compared to bryonia, calcarea carbonica, lycopodium, nux vomica, pulsatilla, sepia, silica, sulphur. A study of this list will hint at the sphere of the drug, the gastro-intestinal tract. It acts predominantly upon mucous membrane everywhere increasing secretion, and upon the skin, particularly in the type of disorder known as rhagadic eczema. In the more external mucosæ (and even in the abdomen) when congested, there develops great itching: canthi, auditory canal, Eustachian tubes, pharynx. The epidermis also itches and burns as if frozen, or, when frozen (*Agaricus*).

Petroleum has a characteristic dread of the open air; there is also a sensation of coldness about the heart, in the stomach, abdomen, uterus, between scapulæ,—localized frigidities.

Its symptoms are apt to appear and disappear suddenly (*belladonna*, *magnesia carbonica*, *lycopodium*); it is especially suited to *lean, slender persons with light hair and skin*.

An emphatic keynote is: *Diarrhea by day*, none at night, with emaciation.

There is no febrile rise. Chilliness predominates.

In the symptomatology the full pathogenesis of certain tracts will be given. This is done purposely, first, because apparently the true sphere of the drug; secondly, because the "old school" have recently "discovered" petroleum as efficient in diseases of these tracts, and it is therefore advisable to keep up with the times and be able to give a scientific reason for facts; thirdly, because it is well to know the drug.

MIND.

Sad, despondent, with sick feeling as of weakness about the heart.

Anxiousness.

Excessive irresoluteness (*baryta carbonica*, *ignatia*).

In delirium thinks another person lies alongside, or, that one leg is double. (Legs seem too long, *cannabis indica*.)

HEAD AND FACE.

Occipital headache, chronic. (*Silica*: both drugs have offensive foot-sweat.)

Headache every morning, with digestive disturbance.

Jaw easily dislocated. (*Rhus*.)

EYE.

Blepharoadenitis, attacking all the Meibomian glands.

Vision obscured as from gauze.

Dacryocystitis (3x recommended), in the stage of catarrhal secretion.

Pannus in scrofulous subjects, non-purulent white discharge.

EAR.

Petroleum (and lycopodium) seems to have a specific action upon the auditory tract (china, upon the labyrinth).

Bad cases of chronic catarrh of the middle ear, with marked deafness.

DIGESTIVE TRACT.

Aversion to meat and fat and to all warm, cooked foods.

Great beer-thirst.

Slimy taste, with white tongue.

Bitter-sour taste.

Flat taste as from deranged stomach, causing nausea.

The stomach is deranged by a little food.

Ravenous hunger, frequently awakened by it at night, easily satisfied; desire only for dainties.

Cerebral congestion after a meal.

Repletion after a moderate dinner, with pressure in the pit of the stomach.

Repeated hot, acid risings and gulpings.

Pyrosis towards morning, and eructations.

Nausea with eructations.

Nauseated and qualmish feeling the whole day.

Nausea in the morning with accumulation of water in the mouth.

Momentary nausea in the morning or evening with inclination to vomit.

Sick stomach from riding in a carriage.

Sea-sickness, "bilious type," (higher potencies recommended.)

Constant nausea and inclination to vomit (ipecac).

Cannot retain any food, especially in anemia.

Sea-sickness especially where there is a persistent nausea and

qualmishness rather than vomiting; if there be vomiting it is "bilious." Vertigo particularly on raising the eyes.

Green-bitter vomit.

Qualmish feeling in the stomach.

Empty feeling in the stomach, with dullness in the head.

Pressure in the stomach, with diarrhea, in the afternoon, preceded by colic.

Feeling of fulness in the pit of the stomach, stomach, or abdomen, frequently painful.

Weak digestion.

Indigestion always better by taking food.

Severe pains in the stomach radiating to the chest and provoking sweat and nausea.

Crampy sensation in the pit of the stomach.

Violent pain in the pit of the stomach.

Gastralgia with pressive drawing pains, better by eating.

Cutting around the stomach, with inclination to stool.

Awakens towards morning with pinching colic, better by bending double.

Pit of stomach sore and painful when touched.

Colic towards morning, with *diarrhea*.

Awakened in the early morning by urgent desire for stool which is *gushing, watery*; sharp cutting colicky pains below navel, rumbling.

Painful tension over the whole abdomen.

Tension and spasms in abdomen.

Pinching in abdomen and *diarrhea the whole day*.

Weak, empty feeling in the bowels.

Cutting in epigastrium with nausea and *diarrhea*.

Cutting pains in abdomen as from cold, followed by *diarrhea*, with bearing down.

Cutting in abdomen followed by discharge of feces and then bloody stools.

Cutting colic in the morning followed by *diarrhea* with a fetid, camphor-like odor; the *diarrhea* is succeeded by ineffectual urging.

Feeling of coldness in the abdomen.

Disagreeable itching in the abdomen.

Rumbling, with feeling of emptiness in abdomen.

Frequent desire for stool with slight *diarrhea* followed by much pressing.

Diarrhea with colic.

Diarrhea after deranging the stomach, especially in stormy weather.

Chronic diarrhea, worse during the day.

Yellowish watery stools.

Stools slimy, preceded by colic.

Diarrhea followed by excessive weakness.

Profuse mucous diarrhea.

Weak feeling in the bowels and rectum.

Diarrhea of bloody mucus. (Teste regards ipecac and petroleum as specific in dysentery.)

Diarrhea from cabbage, sauerkraut, after riding in a carriage.

Diarrhea of pregnant females.

Obstinate diarrhea, with nausea, pain in the bowels, great rectal weakness, discharges light yellow, often every 10-15 minutes; dysentery with similar symptoms, but bloody passages.

Anal burning.

Fistula recti.

Piles and fissura ani; great itching, scurf on the anal margin.

Excrescences on or in the anus, moist, irregular.

A careful study of the digestive tract symptomatology will possibly lead one to suspect that petroleum is a neglected drug not infrequently indicated, especially where there is a diarrhetic or dysenteric complication.

RESPIRATORY TRACT.

Hoarseness.

Cough from *dryness* of the throat.

Dry cough, with stinging under the sternum.

Cough in the evening immediately after lying down (especially in children).

Inclination to vomit when coughing.

Asthma and suffocative huskiness, as from constriction of the trachea with titillation, inducing *dry cough*.

Pressure and tightness of the chest in the afternoon.

Stitching in the side of the chest just below the arm.

Stitching in the chest,—and contractive pain in the head when coughing.

Violent pleuritic stiches.

Violent stitch as if in the heart, arresting breathing.

Dryness and scraping sensation in the larynx.

Bronchial catarrhs.

Cold air causes an oppressed feeling on the chest.

Oppression of the chest at night, with restless sleep.

URINARY TRACT.

Constant dripping, dribbling of urine (or, after the act of micturition).

Chronic blenorrrhea.

Contraction of the urethra.

Burning in the urethra.

Chronic inflammation of the prostatic urethra, with frequent emissions and imperfect erection.

Chronic urethritis accompanying stricture.

SEXUAL ORGANS.

Chronic gonorrhea with urethral *itching*.

Itching and humid herpes on the scrotum; between scrotum and thighs; on the perineum.

Menses too late and scanty; menstrual blood causes *itching*.

Prolapsus uteri in patients reduced by chronic (diurnal) diarrhea.

Albumin-like leucorrhea.

Soreness and moisture on the genitalia with violent *itching*.

SKIN.

Petroleum is characteristic and almost solely indicated in eczema rhagadiforme, deep, frequently bleeding, worse in winter. (The hands should never be washed without the application, before drying them, of a calendulated glycerine which has a hygroscopic and specific healing action or, an *ung. glycerini et petrolati*—glycerine two parts, petroleum one part—may be used. When petroleum internally does not ameliorate, sulphur intercurrently will be of aid.)

Frost-bites, externally and internally. (Cf. *abrotanum agaricus*.)

Pruritus ani, with hypertrophy of the skin and mucosa, rhagadic, accompanied by a painless diarrhea during the day.

Furuncles near the anus.

Brown or yellow spots on wrist, hands, arm, skin.

Intertrigo, raw, red, exudation thin watery, *itching*, behind the ears in infants, especially if of gouty or syphilitic ancestry.

Heavy scabs which fall off leaving a brownish, yellow, spot; *itching*; tendency to ulceration; worse from a walk in the open air; better from warmth and warm air; weakness; aversion to open air; doesn't like to move. Many of these are, of course, general modalities.

BACK.

Vesicular eruption about the nape.

LIMBS.

Cracking in the joints. (They need "oiling.")

Tearing in the hands.

Chapped hands, rhagadic, especially in winter (abrotanum).

Arthritic stiffness of the joints.

Itching of the finger joints.

Rough chapped finger-tips.

Chilblains. (Agaricus.)

MODALITIES.

Worse in winter.

Worse in the open air.

Worse from washing (skin).

Worse in the early morning (digestive tract).

BEDSIDE OBSERVATIONS.

Thinks another person lies alongside or that one limb is double.

Humid (thin, watery exudate) behind the ears (graphites, thick, honey-like viscid).

Eustachian tube affected, causing whizzing, roaring, crackling, with deafness.

Salt rheum of the hands; red, raw, burning, covered with thick crusts.

Salt rheum from knee to ankle; purplish oozing, or covered with scales or scabs easily detached; itching and burning like hell.

Gastralgia when stomach is empty, better by food.

Constant dribbling of urine after micturition.

Deep bloody rhagades on the hands, thick crusts, bleeding, worse in winter, worse from washing.

Ailments from riding in carriage, car, or ship. (Cf. apomorphine, cocculus, nux vomica, tabacum.)

Dry, teasing cough, comes on when lying down at night, frequently found in children.

Chlorosis of young girls, with or without ulceration of the stomach.

Lingering gastric or intestinal troubles, with or without ulceration.

COMPARISONS.

PETROLEUM.

Sweat often confined to the back part of the body.

Vertigo, inclining to fall forwards.

Bitter vomitus.

Painful diarrhea.

Menses too scanty, late.

Better indoors.

CALCAREA CARB.

Sweat often on the front of the body only.

Vertigo, inclining to fall backwards or sideways.

Sour vomitus.

Diarrhea generally painless.

Menses too profuse, too soon.

Likewise better indoors.

PETROLEUM.

Diarrheic.

Lean, slender; light hair and skin; chilly.

Rhagadic eczema.

Worse in winter.

Eruption behind the ears; great itching.

Eruptions ooze thin, watery fluid.

GRAPHITES.

Constipated.

Fat, fair, chilly.

Humid gluey eczema.

Worse in summer and autumn.

Eruption behind the ears; itching not marked, or absent.

Eruptions ooze viscid, honey-like secretions.

PETROLEUM.

Diarrhea predominantly painful.

Diarrheic.

Worse out of doors.

Worse in cold weather.

Worse during full moon.

Aversion to hot food.

Light hair and skin.

Right sided.

Aversion to fats, meats, warm drinks.

LYCOPodium.

Diarrhea, if present, generally painless.

Commonly constipated.

Better out of doors.

Better in cold weather.

Worse during new moon.

Aversion to cold food.

Dark hair and skin.

Also right-sided.

Aversion to cold drinks, wants warm drinks.

PETROLEUM.

Light hair.
Pulse slow during rest.
Pupils dilated.
Hunger predominant.
Much worse by bodily exertion.
Worse in wet weather.
Better in dry weather.

PETROLEUM.

Right side.
Painful eruptions and ulcers.
Hunger predominates.
Vomitus predominantly bilious.
Better indoors.
Wants palms and soles out of bed;
they burn.
Very offensive axillary sweat (Psorinum).

SEPIA.

Dark hair.
Pulse often irregular or trembling.
Pupils contracted.
Generally loss of appetite.
Better by strenuous exertion.
Better in wet weather.
Worse in dry weather.

SULPHUR.

Left side.
Painless eruptions and ulcers.
Generally loss of appetite.
Vomitus oftener sour than bitter.
Predominantly better out-doors;
worse especially in hot crowded
rooms.
Soles burn, sticks them out of bed.
Garlicky sweat in the axillae.

SANGUINARIA NITRICUM IN SPERMATORRHOEA.—Dr. Frederick Kopp, in *Homœopathic World*, has found this remedy very useful in cases of spermatorrhœa in which the seminal losses occurred during the day as well as during the night. Semen was lost while the patient was at stool. Onanism was, in most cases, the exciting cause, and constipation was an accompaniment. The remedy was used in the second decimal trituration every four hours, and the scrotum and penis were bathed, night and morning, in cold water. The treatment was followed by improvement within two weeks, but was kept up for several months.

EDITORIAL.

THE RELATION OF THE PHYSICIAN TO HIS PATIENTS.

THE status of the physician in his relation to the public has materially changed during the past three decades. The old-fashioned "family doctor," who was also the family adviser and friend, has largely passed away. In his place has appeared a new type of physician—one whose main interest lies in what is termed "scientific medicine." His intercourse with his patients is almost entirely professional in its character, and socially they see or know little of each other.

This change in the relation of the physician to his patients has its advantages and also its disadvantages. At times, under the old system, the physician used the friendship and regard of his patients as a cloak for his ignorance and incompetency. Many a patient has felt the necessity of consulting the opinion of a more expert practitioner in regard to some obscure condition, but avoided doing so for fear of offending the "old family doctor," who perhaps opposed such a consultation. The only just and proper claim which a physician, in his professional capacity, can have upon his patients is his professional knowledge and skill. A pleasing manner and a sympathetic smile are very proper and laudable attributes to any practitioner of medicine, but they cannot compensate for ignorance and neglect to keep abreast with the progress of medical art.

On the other hand there is a great tendency for the modern physician to become a theorist and a "laboratory man," instead of a healer of the sick. In his thirst for what he considers "scientific medicine"—which is only too often a collection of untried theories and misinterpreted facts—he forgets that his primary duty is to heal and comfort his patient. In his desire to secure an interesting autopsy on an obscure case, he forgets that he has been employed by the patient to restore his health or at least ameliorate his suffering. In other words, many of the so-called scientific physicians of to-day regard their patients merely as "specimens" and accordingly have become indifferent to their distress and have lost that deep sym-

pathy for the suffering which after all is the noblest inspiration and greatest incentive to work which any physician can have.

The air of superiority with which the average laboratory worker looks upon the every-day general practitioner of medicine is interesting to observe. He appears to forget that the vast majority of measures which have proven useful in the treatment of disease and in the amelioration of suffering, have been discovered by practical physicians, and that Dr. Heinrich Stern stated a well recognized truth in his address before the American Medical Association in July, 1905, when he said "with all unbiased experimenters he deeply deplored the trend of modern pathology and the meager, definite and employable data furnished to practical medicine by the laboratory." In speaking of the requirements for the practice of medicine he further said "the least important in practical medicine is the pathology, for which the patient evinces hardly any interest. . . . Let us ask what service, if any, it has ever rendered to the common every-day practitioner of medicine, for it is of him and not of the different specialists I speak. If we come to the point, it is in reality nothing else than the antitoxin for diphtheria which pathology has furnished him. Everything else emanating and taking its root from the science teaching of the nature of disease for the purpose of curing the latter has proved ephemeral, in vain, illogical and unscientific."

These words, coming as they do, from a man who has spent many years in laboratory and pathological work, and who is to-day at the head of an institution for medical research, are worthy of serious consideration.

His statement that modern methods of laboratory investigation have contributed practically nothing that is of use to the general practitioner of medicine we believe to be incorrect. We are of the opinion that, from the standpoint of both diagnosis and treatment, physicians would be seriously handicapped in their work if they were deprived of the information to be obtained from laboratory methods of examination.

It must be borne in mind, however, that there is a clear distinction between a laboratory worker and a practitioner of medicine. Each has a separate and distinct sphere. A knowledge of morbid anatomy and laboratory methods, does not qualify a man to successfully practice medicine. Pathol-

ogy, chemistry, pharmacology and other branches related to medicine are sciences, but the practice of medicine is an art. The success or failure of practitioners of this art, in the cure of disease or in the amelioration of suffering, depends largely on the personal equation of the individual. The practical physician must be able to use his head as well as the test tube, and take as sincere an interest in restoring his patient to health, as in obtaining a post-mortem examination on his cadaver.

It is said that a great many people have lost confidence in medical practitioners and are resorting to christian science, mechano-therapy, osteopathy and other fads of the hour. This is presumably because they do not obtain the physical relief and mental comfort they desire from their physicians. The physicians are largely to blame for this state of affairs. Many of them have become investigators of specimens instead of healers of the sick, and the modern pathologic school of medicine has fostered a spirit of therapeutic uncertainty which discourages the physician in his work and destroys the confidence of his patients.

We are not condemning the work of laboratory investigators or of pathologists. They have their proper field of activity and usefulness. We simply insist that the practitioner of medicine be not induced by excessive zeal for laboratory methods to disregard the dictates of common sense and his proper duty to his patient. The ideal physician is one who accepts those results of laboratory research which are of practical value, and at the same time administers, in all skillfulness and in all sympathy to the sick, those measures which time and experience have proven to be of value in the restoration of health and in the amelioration of suffering.

ROBIN'S REPORT ON THE PHYSIOLOGICAL ACTION OF INFINITESIMAL DOSES OF CERTAIN METALS.

SCIENTIFIC investigators in all lines of research are constantly bringing to light new facts which tend to elucidate and to more firmly establish the truth of the fundamental principles of homœopathy. For a long time the utility of certain methods employed by the homœopathic school was capable of demonstration at the bedside, but their *modus operandi* could

not be explained by the knowledge we then possessed of chemical or physical laws. With the growth of knowledge these obscurities have one by one disappeared, until to-day practically all the essential principles and methods of homœopathy are capable of a rational explanation in accordance with well established physical or chemical laws.

It is not our aim or intention here to recount the various steps by which the homœopathic system has grown to its present condition. An able and interesting review of this subject will be found in the classical paper of Dr. Aug. Korndoerfer, Sr., in the present issue of the HAHNEMANNIAN MONTHLY. We shall confine our remarks to the experiments of Dr. Albert Robin, of Paris, which furnish the strongest proof of the ability of minute doses of certain drugs to affect the human economy that have ever come from allopathic sources. The seriousness with which the members of the dominant school have regarded his experiments is shown by the publication of Robin's article in the *International Clinics*."

Robin used in his experiments, solutions of gold, silver and platinum, obtained by passing a feeble electric current between metal electrodes immersed in distilled water. Solutions of gold made in this manner contain from 0.00009 to 0.0002 gram of metal per cubic centimeter (twenty minims.)

He found on injecting this solution of gold under the skin, that "almost infinitesimal doses are endowed with very great activity." The results were:

1. An increase in urea, which may rise as much as 30 per cent.
2. An increase in the coefficient of nitrogenous utilization.
3. An increase in uric acid which may reach high figures, —as much as three times the initial quantity.
4. A positive flush of urinary indoxyl.
5. A decrease in the quantity of total oxygen consumed.
6. A temporary raising of arterial tension.
7. A profound modification of the blood-globules. An injection is followed after several hours by manifest leucocytosis, slight in a healthy person, intense in infectious disorders habitually associated with leucocytosis; decrease in the number of leucocytes begins at the end of an hour or two and lasts for a period of time varying from one to two days. The red corpuscles do not seem to undergo any noticeable modifications

Robin then goes on to say that these results show the possibility of assimilating metals in a condition of extremely diluted solutions, their action being similar to organic diastases. "In the above-mentioned solutions," he says, "the atoms of the metal, separated as widely as possible, are, as it were, liberated, autonomous in their activity, and susceptible in this way of developing greater energy. . . . It is not difficult to conceive that these simple bodies, even in the infinitesimal doses in which they are found, are capable of influencing the chemical reactions of elementary nutrition. . . ."

After referring to the results obtained by the use of gold in doses of 0.001 gram in pneumonia, which he claims in six cases out of ten produces a crisis in six days, he draws the following conclusions from his experiments:

1. *"That metals in extreme subdivision are capable of remarkable physiologic action, out of all proportion to the amount of metal used."*

2. *"That such metals, acting in doses which therapeutics considered heretofore as ineffectual and useless, by making a profound impression on some of the clinical processes of life whose deviations are connected with many morbid conditions, are probably destined to take an important place among the remedies of functional therapeutics."*

The student of homœopathic literature who reads the conclusions of Robin must be impressed with the evident audacity or ignorance of their author. Either he has boldly made these statements in the hope that none of his hearers or readers would be familiar with the work and writings of homœopathic physicians, or he lives in gross ignorance of the fact that almost every important deduction he has made regarding the action of minute doses of metals was stated in as *clear terms* by Hahnemann a hundred years ago.

A careful study of Dr. Robin's article discloses the fact that he fails to give even the least credit or reference to the work of Hahnemann or of the homœopathic school. And yet we can scarcely conceive of any enlightened physician who does not know that it was because Hahnemann discovered and investigated the physiological action, and advocated the therapeutic use of minute doses of certain drugs in a finely divided state, that he was subjected to the most violent criticism and discredit. We must conclude that Dr. Robin was not unaware

of these facts, and that his effort to place himself before the medical profession and the public as the discoverer of the therapeutic action of minute doses of metals is an unjust attempt to appropriate to himself the honors which belong to another.

It might be remarked in passing, that this is only one example out of many where physicians of the dominant school have propagated among their professional confreres, methods and principles taken bodily from the homœopathic school of practice, and appropriated all the credit to themselves. The homœopathic school is composed of intelligent and able physicians and does not need to ask favors of anyone, but we do ask that those who are wise enough to adopt and use homœopathic methods, be fair enough to give the credit where it belongs.

Robin's article is of peculiar significance because he admits the power of infinitesimal doses of drugs to influence the state of the human organism. This question has always been a source of bitter contention between the advocates and opponents of homœopathy. Many who were compelled to admit the clinical superiority of homœopathic methods, could not reconcile themselves to the belief that minute doses of drugs could exert any influence on the human organism. This objection is fast being cleared away. Physical sciences have recently invaded a new field of investigation and the discovery of radio-activity, ionization, etc., have given us some conception of the energy of atoms. With the growth of this knowledge, the theoretical explanation of the practical results of homœopathy must become more and more clear, until physicians shall everywhere recognize, as does Dr. Robin, that minute doses of drugs properly prepared and selected in accordance with the homœopathic principle are destined "to take an important place among the remedies of functional therapeutics."

GLEANINGS.

INFLUENCE OF POSTURE ON ADVENTITIOUS BREATH SOUNDS, WITH SPECIAL RELATION TO THE EARLY DIAGNOSIS OF PHTHISIS.—W. B. Ranson states that for years he has noticed that patients liable to attacks of bronchitis, and who usually have more or less emphysema, and as well those who suffer from asthma, when examined standing, the chest was free from adventitious sounds, and upon lying down one may hear widespread bronchi and sibili, both inspiratory and expiratory. This condition was marked in one case of supposed capillary bronchitis, which proved to be a disseminated tuberculosis of the lungs. This condition led him to examine some supposedly tubercular subjects, with the following results: He reports two cases, which showed the clinical features of a tuberculosis, but examination of the chest while standing, revealed positively negative results, but when lying, both cases, evidenced fine crepitations, in the first two spaces on the right side. Both of these cases subsequently developed the physical signs of a tuberculosis, showing the presence of tubercle bacilli. A third case recorded was that of a young girl, who had been treated in a sanatorium for a lesion at the right apex. She had been in good health for a year, under a siege of nursing, she again developed symptoms of her former trouble. Examination revealed slight dullness, and weak, harsh breath sounds at right apex, no crepitations. Upon lying down distinct crepitations were heard, mainly inspiratory, heard in first two intercostal spaces on right side. The cause, he states, at present is obscure, and that these cases are only made public for confirmation, but in conclusion states: whatever the explanation may be, the point brought out in this note is that, not only in cases of bronchitis and emphysema, but in a few cases of limited pulmonary tuberculosis, adventitious sounds may be heard in the supine, while absent in the erect position.—*The British Medical Journal*, October 21, 1905.

G. MORRIS GOLDEN, M. D.

A CASE OF ADDISON'S DISEASE.—Byrom Bramwell in the *British Medical Journal* of October 28, 1905, reports a case of Addison's disease in which great improvement took place under open air treatment and the administration of suprarenal extract. The patient, a male, 36 years of age, had been ill for eighteen months, exhibiting the typical clinical features of a case of Addison's disease. Upon admission to the hospital, the effect of open air treatment was decided upon after some hesitation, owing to the fact that most patients affected with Addison's disease are very susceptible to exposure. The patient was placed on a balcony in the open air, and despite the inclement weather, stood the exposure well, and did not complain of the cold. At the same time suprarenal extract (5 grains three times daily) was administered.

Remarkable improvement resulted, the patient gaining 6 pounds in weight, the pigmentation of the skin and the asthenia became markedly less, this following a residence of about three months in the hospital, after which he was discharged and kept under observation for about four months longer, at which time he expressed himself as feeling well. He returned to his work, and about one year later, he was suddenly taken with marked asthenia and cardiac weakness, death resulting in about twenty-four hours. He goes on to remark that the case is interesting in showing that in Addison's disease, even when marked improvement has taken place, the patient's life is a precarious one, due to the fact of the abolished function of the suprarenal glands. Furthermore that they should lead inactive lives, and the point impressed upon them that they are not cured, although greatly improved, and anything likely to depress the heart's action may be attended with great danger.

Another case is also cited in which the open air treatment was instituted, but without any result, due to the advanced stages of the disease. There are two clinical features which are also mentioned. First, that of the blood condition in both cases, neither showing any marked anemic condition, as exhibited by the blood count, or the objective symptoms, which symptoms Addison himself laid great stress upon, and secondly that in both cases an analysis of the stomach contents showed the complete absence of hydrochloric acid.

G. MORRIS GOLDEN, M. D.

DIAGNOSIS OF THE VARIETIES OF PLEURAL EFFUSION.—Hadley states that the importance of making a correct diagnosis lies in the fact that a very large number of cases of pleurisy with effusion are in reality tuberculous and the treatment differs considerably according to its true nature.

He classifies them: 1. Inflammatory or septic (in its widest sense). 2. Tuberculous. 3. Mechanical, (that is due to renal or cardiac disease). 4. Cancerous. He states the chief difficulty is the diagnosis between the inflammatory or septic, and the tuberculous cases, and not overlooking a tuberculous effusion. Those cases due to cardiac, renal, or malignant disease usually definitely disclose themselves.

The means we have to arrive at the nature of an effusion are as follows: 1. Clinical. 2. Cultural. 3. Inoculation. 4. Tuberculin. 5. Jousset's microscopical. 6. Cytological. 7. Sero diagnosis.

In summing up briefly these several methods, they may be stated as follows:

1. *Clinical*.—Rapidity of onset, acuteness of symptoms, antecedent acute lung condition, as pneumonia, bronchitis, or associated with acute or chronic rheumatism, with or without endocarditis or pericarditis, and often with high temperature, point to an inflammatory or septic type. Those of insidious onset, and chronicity of symptoms, and lower range of fever, are the features of a tuberculous effusion. In cardiac and renal disease, there will be many other signs and symptoms to guide us; whilst in cancerous effusion, apyrexia, and signs later of malignant growth of the lung.

2. *Cultural*.—This consists of culture of the fluid withdrawn, and is fairly reliable, but many cultures remain sterile, with negative results.

3. *By Inoculation.*—By the introduction of some of the effused fluid into guinea pigs, this gives an average of about 40% positive results, but leave many cases doubtful.

4. *By Tuberculin.*—This is of undoubted value and yields over 70% positive results. This is not free from danger, and secondly will react to tubercle bacilli anywhere in the body.

5. *Jousset's Microscopical Method.*—This is reliable and easy of application. The steps are as follows: 1. A few ounces of fluid are withdrawn. 2. This is allowed to clot. 3. Clot digested with artificial gastric juice. 4. The digested material now fluid, is centrifuged, precipitate examined for tubercle bacilli. Jousset makes the statement that by this method he was enabled to demonstrate in 20 cases of primary sero-fibrinous pleurisy, the tubercle bacilli in every case.

6. *Cyto-diagnosis.*—This is founded on the different numbers of the various cells present in pleuretic effusions, according to their causes. In considering the various effusions, the cell elements will be approximately found to be as follows: 1. Septic, almost exclusively polymorphonuclear. 2. Tuberculous. Cells mostly small mononuclear (lymphocytes), rarely polymorphonuclear. 3. Mechanical. Cells much fewer in number, the characteristic ones being the flat endothelial cells from the pleural lining. The authorities agree that this is the most reliable, and that it may be accepted that an exudate showing a half, or more of the cells as mononuclear (lymphocytes) is tuberculous in origin.

7. *Serum diagnosis.* This is an agglutination test, it is not applicable to general practice.

In closing the following suggestions are submitted: 1. That it is important to appreciate the frequent tubercular nature of pleural effusions. 2. That clinically, if an effusion takes place without any apparent cause, neither as result of trauma, or some trouble in lung, mediastinum, or pericardium within, and there is not heart or kidney disease to account for it, then it is almost surely tubercular. 3. That pathologically we have several reliable ways of definitely determining its true nature, the two most reliable and convenient being: (a) The estimation of the cell content of the fluid. (b) Jousset's method of demonstrating the presence of tubercle bacilli.—*The British Medical Journal*, October 28, 1905.

G. MORRIS GOLDEN, M. D.

THE PRESENT STATUS OF ROENTGEN RAY THERAPY IN DERMATOLOGY.—Comroe. The writer concludes:

1. Radiotherapy must not be considered a panacea. Although it has a very large field of usefulness, it also has its limitations and dangers.

2. Most consistently good results are obtained in epithelioma, rodent ulcer and acne.

3. Great benefit may be looked for in eczema, chiefly the vesicular variety affecting the hands, sycosis, tinea tonsurans, verruca, lichen planus, naevi, and port wine marks, localized pruritis.

4. Deep-seated epitheliomas, with exposure of the bones and cartilages, appear to do well for a time but eventually get worse.

5. For these cases the use of radiotherapy along with careful operation is to be advised.

6. The Roentgen rays are beneficial when pain is particularly to be avoided, as in old or feeble persons.

7. Radiotherapy produces the best cosmetic results.

8. Recurrences are less frequent after radiotherapy than after other methods and are more amenable to re-application of the rays.

9. The high vacuum tube is preferable in epithelioma, rodent ulcer and lupus.

10. The medium or soft tube may be used in others.

11. Radiotherapeutic treatment should be begun as early as possible, the good results being directly proportional to that factor.

12. Epithelioma of the skin usually reacts better than that involving the mucous membrane.

13. Tampering with caustics and other irrational means are to be condemned as measures preceding radiotherapy, since they undoubtedly unfavorably alter the prognosis in such cases.

14. No rule can be laid down to prevent burns, hence the dosage must be carefully watched in each individual case.

15. No protective ointments or powders should remain on the part treated, since they prohibit or lessen the effect of the rays by interfering with their passage.—*American Medicine*, June 17, 1905.

WILLIAM F. BAKER, A. M., M. D.

THE LARYNX IN TYPHOID FEVER.—JACKSON. From laryngoscopic observations of 300 cases of typhoid fever the writer offers the following conclusions:

(1). Serious and fatal lesions of the larynx are much more frequent than is realized.

(2). Death may occur from laryngeal stenosis without even the existence of a laryngeal lesion being suspected without laryngoscopic examination. If pain and hoarseness be present the diagnosis cannot rest upon that alone and in fact is seldom made. The pain may be masked by the toxæmia. Cyanosis and dyspnœa are rare, apnœa very common.

(3). Unlike the complications of the exanthemata, ulcerative laryngitis complicating typhoid fever bears as to its likelihood of its occurrence its course, and its termination, a close relation to the severity of the primary disease.

(4). The severity of the laryngeal lesion is in direct proportion to the toxæmia, pyrexia not being in itself a factor, but only an index to the toxæmia.

(5). Thrombosis of the laryngeal vessels in the mucoia or deeper is probably the most frequent local initial lesion.

(6). Mixed pyogenic infections are the rule. Laryngeal lesions due to the bacillus typhi abdominalis are exceedingly rare.

(7). Prognosis as to life is good if considered apart from the general malady. Not only the life but the laryngeal and vocal organs and the respiratory functions may be saved if tracheotomy be done early. Death from a laryngeal lesion means a death for the want of an early tracheotomy.

(8). Prophylaxis consists in good ventilation, without draughts, sterile bedding, oral antiseptics, sterile food and water.

(9). Treatment. Early tracheotomy will cure almost every case. Local anæsthesia is all that is needed.

(10). A laryngoscopic watch of all typhoid convalescents. *The American Journal of the Medical Sciences*, November, 1905.

WILLIAM F. BAKER, A. M., M. D.

MILK AND SCARLATINA.—Hamilton. The literature of this subject has been gone over by the writer and two fallacies pointed out, for he believes that the results of observations are based on the following:

(a) Insufficient evidence as to the agency of milk in the dissemination of disease.

(b) An erroneous belief that a disease in cows is capable of producing scarlet fever in man.

The conclusions drawn are:

(1). The disease in cows supposedly responsible for scarlet fever in man is ordinary cowpox.

(2). The diseases in man supposed to be caused by it is either septic fever from infection or pyogenic micro-organisms.

(3). There may be a coincident scarlet fever.

(4). There is no good evidence that milk from diseased cows can produce scarlet fever in man.

(5). Many of the reports of milk-borne infection of scarlet fever are to be rejected, but still there are a good number that are above suspicion.

(6). These mere authentic reports prove the milk is a good culture medium for the bacillus of scarlet fever.

(7). Milk is the most frequent agent of direct infection in this disease. —*The American Journal of the Medical Sciences*, November, 1905.

WILLIAM F. BAKER, A. M., M. D.

ON GONORRHEAL SEPTICÆMIA AND ENDOCARDITIS.—Thayer. The comparative frequency of endocarditis seen as a result of gonococcus infection is the general observation of Blumer, Lazear and Thayer.

Gurvick has made evident the fact that gonorrhœa may be followed by mild forms of valvular heart disease, but the cases that have attracted more attention have been the malignant forms.

Padula, in 1892, described a form of mild or continued fever following upon gonorrhœa. This ran a short course and disappeared in a few weeks.

From the present knowledge it is natural to regard all these cases as indicative of a general septicæmia, but definite proof in milder cases has not been established.

Several cases are given in detail, but the main points of interest in the observations were:—

(1). The demonstration of the fact that the mild, continued fever sometimes seen in connection with gonorrhœa, without apparent complications is, in some instances at least, evidence of a true gonorrhœal septicæmia.

(2). A true gonorrhœal septicæmia in cases in which there is no evidence of local complications may run a course not dissimilar to that of typhoid fever.

(3) In doubtful cases of continued fever associated with gonorrhœa, the possibility of a gonorrhœal septicæmia should always be borne in mind.

The cases of ulcerative endocarditis following gonorrhœa are the next ones to receive attention, and in the cases reported the direct association between the acute gonorrhœa and the development of ulcerative endocarditis seem to make them true cases of gonorrhœal septicæmia. However, in one case, the relationship cannot be said to be distinctly proven, as the writer admits, yet the history of its development following the complications of a severe urethritis is suggestive and undoubtedly the urethritis was the portal for the entrance of the infection.—*The American Journal of the Medical Sciences*, November, 1905.

WILLIAM F. BAKER, A. M., M. D.

ANEURYSM OF THE ABDOMINAL AORTA.—Osler reviews 16 cases of aneurysm of the abdominal aorta at the Johns Hopkins Hospital during the last sixteen years. These cases occurred among about 18,000 admissions to his ward. The ratio of abdominal to thoracic aorta was about 1 in 10. Fourteen of these cases were in men and 2 in women, which is in accord with other statistics. A definite history of syphilis was obtained in nine cases; in four others it was doubtful. Ten of the patients were alcoholics.

Pain of a dull, boring, steady form, varied in some cases with paroxysms of frightful severity, was the principal symptom. It may simulate the pain of gall stones, of renal colic, or of appendicitis, and pressure on the nerves may cause pain in the testicles and in the course of the anterior crural or sciatic nerves.

A diagnosis can only be made upon the presence of a palpable, expansile tumor. Pulsation in the abdomen, evident to the eye of the observer, may be present normally, or with cardiac hypertrophy and dilatation of valvular disease.

Abnormal aortic pulsation is met with in the following conditions:

First, in neurotic and hysterical states, chiefly in women. This is a frequent source of error. The points to be borne in mind in these cases are: (1) That the pulsation occurs in nervous or hysterical women or in neurotic or hypochondriacal males. (2) The subjective sensations may be pronounced, pain, abdominal distress, nausea, sickness, constipation, and, in some instances, the vomiting of small quantities of blood and the passage of blood in the stools. (3) The degree of visible and palpable pulsation may be extreme. The abdominal aorta is easily grasped, it may be tender, but no definite tumor can be felt. With much anæmia a thrill may be present.

Secondly, preternatural pulsation in the upper portion of the abdomen may be associated with tumors. The greatest difficulty in diagnosis is met in comparatively small tumors directly over the course of the vessel.

Thirdly, in anæmia. In extreme anæmia there is throbbing of the arteries, and the pulse may even have the Corrigan or "water-hammer quality."

Fourthly, the aorta may throb so forcibly in aortic insufficiency that aneurysm is suspected. In the diagnosis of aneurysm of the abdominal aorta perhaps the greatest difficulty arises when the sac has ruptured behind the peritoneum with the gradual formation of a large tumor, filling

the upper part of the abdomen, or one or both flanks, and in which there may be little or no pulsation. Nowadays, when laparotomy is so common this form of aneurysm has been operated upon not infrequently, and there is perhaps no more tragic event in operative surgery than unwittingly to open such an aneurysm.

Three of these cases belonged to this variety and the author reports them in full.

Seven of the cases were treated by wiring and electrolysis, with the following results: One case died 48 hours after from rupture of the sac into the pleura. One case died on the ninth day from hæmorrhage into the peritoneum. One case was discharged at the end of four weeks improved; no subsequent history. One case died on the fourteenth day from rupture of the sac. Another case was discharged at the end of one month much improved, the pain had diminished, and the pulsation was lessened. No subsequent history was obtained. In one case there were three hæmorrhages from the bowels after operation, but for two months there was steady improvement, when rupture occurred into the retro-peritoneal tissues. Death occurred six and one-half months after operation.

The most satisfactory case was a young man, 30 years of age, who suffered greatly and had severe gastric symptoms. The operation was followed by marked improvement; reduction in size of the sac, disappearance of the pain, and complete relief of the nausea and vomiting. He returned to the hospital every year for a few weeks. At the last visit the sac had increased in size and three and one-half years from the date of the operation he died from rupture of the sac.

In one case of a diffuse aneurysm an attempt was made to reach and compress the aorta. The sac was opened and the clots turned out, when there was a sudden rush of bright red blood and the patient died upon the table.—*The Lancet*, Oct. 14, 1905.

J. D. ELLIOTT, M. D.

CHRONIC ULCER OF THE STOMACH AND FIRST PORTION OF THE DUODENUM. —Wm. Mayo reviews in a general way the surgical treatment of duodenal and gastric ulcers. That ulcer of the duodenum occurs more frequently than formerly supposed is becoming apparent now that more careful examinations of this organ are being made. In 231 cases of gastrojejunostomy performed by the author and Charles H. Mayo, from January 1, 1903, to July 1, 1905, there were 158 gastric, 60 duodenal and 14 duodenal and gastric ulcers.

For clinical purposes the ulcers are divided into indurated and non-indurated ulcers. The indurated ulcer involves all the coats of the organ and is easily recognized externally as a thick, milky-white patch—151 of the 231 cases were of this variety. Although the non-indurated ulcers give evidence of the disease, there is nothing to show the site of the ulcer upon the exterior of the stomach. The reason for this is that the lesion involves only the mucous coat. Occasionally a little thickening can be discovered or a little glueing of the mucous to the muscular coat, preventing the normal slipping of the one upon the other. An ulcer may sometimes be located by an enlarged "sentinal" gland in the omentum, tributary

to the lesion. In nearly all open ulcers the lymphatic glands in the gastro-colic omentum were definitely enlarged; in this respect being unlike cancer, which affects the glands of the lesser curvature by preference.

It is probable that this may be a valuable diagnostic sign, and that enlarged glands should be found in all cases of ulcer, mucous or otherwise. The value is somewhat lessened as adenitis is sometimes found in the same situation in cases of cholecystitis; but in these cases enlarged glands should also be found along the common duct.

The author strongly advises against indiscriminate operations, especially in the cases of neurasthenics with symptoms depending upon a neurosis. Such operations are not successful and will only bring gastric surgery into disrepute. And he does not advise operation in any case of acute ulcer, unless complications such as perforation, hæmorrhage, grave obstructions, etc., demand it.

Operation is advised in all cases of stagnation and retention of food depending upon mechanical causes such as pyloric obstruction, and in cases of exhausting hæmorrhages. Operation is advised in that considerable group of chronic cases with acute exacerbations, in whom frequent relapses with their attendant disabilities prevent the patient from enjoyment of good health. That there is a large field for surgical treatment of gastric ulcer is evident from the study of the statistics of medical treatment.

500 cases treated medically in the London Hospital in the five years from 1897 to 1902, gave a percentage of 18 for the death rate, and 42 per cent. were not cured at the time of discharge. As 211 of the 500 had been cured, one or more times, of previous attacks, it is hard to predict the future of the 40 per cent. discharged as cured. Greenough and Joslin, of the medically treated ulcers in the Massachusetts General Hospital, showed that only 55 per cent. were discharged as cured, and 56 per cent. of these supposed cured were dead or still suffering five years later.—*The Journal of the American Medical Association*, Oct. 21, 1905.

J. D. ELLIOTT, M. D.

CONTUSION OF THE KNEE-JOINT.—When fluid is allowed to remain in a joint for some time the capsule and ligaments become chronically distended and lax, and the fibrin becomes deposited upon the wall of the joint, or floats free and gives rise to foreign bodies in the joint. For these reasons Carleton P. Flint believes that every traumatic knee showing localized tenderness with effusion into the joint should be aspirated, provided there is not a marked diminution in the amount of effusion under treatment at the end of one month. If a hæmarthrosis is present, a small incision should be made and the joint washed clean, as the clots and thick fluid will not flow through a trocar. If fluid reaccumulates it should be drawn off again. The author reports four cases of injury of the alar and mucous ligaments openly operated with good functional result.—*Annals of Surgery*, September, 1905.

J. D. ELLIOTT, M. D.

THE NEURITIC FORM OF ALBUMINURIC RETINITIS.—In a clinical report on a case of this character a few points are given which seem to support the view that the condition is primarily an edema of the papilla and nerve and not an inflammation:

1. The preponderance of edematous distension, and the comparative insignificance of the cellular infiltration of the papilla and trunk of the nerve.

2. The manner in which the swelling is seen, both ophthalmoscopically and microscopically, to be limited to the actual nerve-head.

3. The retention of good vision.

4. The apparent tendency of the swelling of the disk to diminish when free diuresis was established, relieving the mental symptoms, and presumably causing diminution of intracranial pressure. It is to be noted that cases presenting this ophthalmoscopic picture have usually shown an exaggeration of mental and cerebral symptoms, thus exhibiting a group of symptoms suggestive of intracranial tumor. One is tempted to think that the edema of the nerve may have its origin in a rise of intracranial pressure, due, perhaps, to excess of fluid in the lateral ventricles of the brain.

. In the case reported, such improvement as resulted from the onset of diuresis might be attributed directly to relief of such excess pressure. It certainly was due to no improvement in the general health of the patient, who died three days later with no new development of pressure signs.—

A. J. Ballantyne, Glasgow, The Ophthalmoscope.

WILLIAM SPENCER, M.D.

OPTIC NEURITIS AND FACIAL PARALYSIS.—E. A. Shumway reports a case of post papillitic optic atrophy with a history of a prior right-sided facial paralysis with pain in jaw and with a noticeable flattening of the right side of the face from loss of subcutaneous fat, together with enophthalmus, all on the right side, while the optic atrophy was bilateral, most marked on the left. He finds in the literature only seven similar cases of this association of facial paralysis and optic neuritis, though a number of cases of optic neuritis have been reported in connection with polyneuritis. The atrophy and sinking of the eye-ball is evidently rare, as he has found no reports of a similar case. He has, however, been able to examine a case with flattening of the face an enophthalmus following rheumatic facial paralysis and implying, he thinks, as in his own case, some involvement of the seventh nerve.

There were chloroanemic and disordered menstrual symptoms in his case, but he does not attribute to them the optic atrophy.

His conclusions are given as follows:

1. Optic neuritis is occasionally associated with facial paralysis, either alone or as part of a multiple neuritis; the etiological factor may be rheumatism, but at times appears to be infection, the nature of which is as yet undetermined. The optic neuritis is usually of the retrobulbar type, but a decided papillitis may be present, and be followed by more or less marked atrophy. In cases of multiple neuritis of the cranial nerves, the eye grounds should be examined for possible optic nerve complication.

2. In facial paralysis, flattening of the face and enophthalmus may appear, and are to be considered as due to a neuritis of the fifth nerve, and not to involvement of possible sensory fibres in the facial nerve.—*Annals of Ophthalmol.*

WILLIAM SPENCER, M.D.

RECLINATION OF THE LENS.—H. T. Rogers reviews the literature on the old operation of couching and gives the replies received from various prominent ophthalmologists in answer to a letter addressed to them by him asking about their experience with, and their opinion of, this operation. He also gives reports of a case in detail. He concludes that the operation is permissible in the following conditions: 1. In the aged and infirm and in those suffering from exhaustive diseases. 2. When there is a non-curable infection of the conjunctiva or of the lacrimal sac. 3. When one eye has been lost by suppuration or hemorrhage following operation and a similar result is feared. 4. In obstinate bronchitis. 5. In fluid vitreous with tremulous iris. 6. In insane or unmanageable patients. 7. In the very deaf, where the assistance of the patient cannot be secured. While the majority of his correspondents advise against the operation, Rogers thinks that it should not be relegated to complete oblivion. He thinks that the arguments used by some of those who oppose it in these cases are not based on experience. In the case reported, besides the loss of the first eye by suppuration after iridectomy, there was a chronic intractable conjunctivitis and diabetes, affecting the general nutrition. The operation was at least partially successful, though the result was not perfect, and it demonstrates that it can be done without the inevitably disastrous results claimed by some.—*Annals of Ophthalmol.*

WILLIAM SPENCER, M.D.

EYESTRAIN.—L. S. Dixon, Boston, states that eyestrain is not a medical fad, but a serious reality. The eye as an optical instrument is in most cases more or less imperfect, and while a vigorous constitution and nervous organization in some cases may compensate for the overtaking of the ciliary muscles, in others this is a decided tax, producing sooner or later serious consequences, both local and general. He emphasizes the necessity for complete rest for the eyes and for properly fitted glasses. The patient should learn to accept as much correction as he can and to follow the oculist's directions. Easy vision without fatigue, he says, is the test of a good eye, not sharpness and clearness of vision, which may exist with serious discomfort. He advises early search for errors in the child before habits are formed that it is necessary to break and when the child can learn to accept full correction. The use of glasses part of the time at home in the house may be sufficient to ward off present and future trouble.—*Annals of Ophthalmol.*

WILLIAM SPENCER, M.D.

INJURIES OF THE OPTIC NERVE.—In five cases of indirect injury of the optic nerve the sequence of events was as follows: A more or less severe blow in the region of the external angular process of the frontal bone. Sudden impairment of vision on the side of injury. Loss of the greater part of the temporal field of vision on the same side. Absence of ophthalmoscopic changes for the first few weeks, followed by atrophy of the nerve head on the injured side. Central vision may be almost completely restored, but the limitation in the field of vision remains practically and permanently the same. The nature of the lesion is very problematical, but it is probably one of limited contusion of the nasal fibres of the optic nerve, the nerve on the side of the injury being driven against the inner boundary of the optic foramen.—*The Homeopath, Eye, Ear and Th. Jour.*

WILLIAM SPENCER, M.D.

CARCINOMA OF THE UTERUS. Some papers on this subject read before the American Gynecological Society and the discussion following them, Dr. Frederick said had brought out facts which could be summarized as follows: Operations of more extensive nature, which were calculated to remove all the infected glands in the pelvis, had been followed, and given varied results for various reasons; there had been large mortality rates, and there had been failures to cure patients and prevent recurrences. Patients with cancer of the cervix so far advanced as to involve the pelvic lymphatic glands were hopeless cases. He believed, too, that it rested with the laboratory to devise some means, some anti-toxin, which by its systemic action would rid the patient of this dread disease; such results would not, in his opinion, occur through surgical efforts. Operations should be done only in those cases where the disease, as shown macroscopically, by touch and sight, was supposed to be confined or limited to the uterine tissue. If there was involvement of the parametrium, or cellular tissue outside the cervix, he believed it to be hopeless to operate, because then we simply mutilate our patient. In far advanced cases, curetting and cauterizing the uterus gave better results, and the patient lived longer and in better condition than if a total extirpation had been done.—*Amer. Jr. Obs.* Vol. LII, 268.

THEODORE J. GRAMM, M. D.

TOXEMIA OF PREGNANCY WITH VOMITING.—McDonald (New York) has examined the relation of this condition to eclamptic toxemia, acute yellow atrophy and experimental necrosis of the liver. Attention has lately been directed to these morbid manifestations accompanying pregnancy and the puerperium, which cannot be shown to be due to a direct bacterial infection. It appears that these conditions have a common origin in a state of intoxication, always accompanied by functional incapacity of the liver. This is shown during life by the well known manifestations of the auto-intoxication and by the excretion of products of faulty metabolism, such as leucin and tyrosin, known to be associated with liver insufficiency, and grave changes seriously interfering with functional activity of the organ. These facts suggest the theory of an autointoxication due to hepatic insufficiency as the underlying factor in the causation of these morbid manifestations. A number of obstetricians look upon this intoxication as the cause of many of the troubles of gestation such as hyperemesis gravidarum, puerperal neuritis, eclamptic toxemia, and perhaps gestatory psychoses, in addition to many of the minor disturbances such as gastric disorders, headache, and certain skin lesions.

Stone has recently directed attention to the similarity between the liver lesions of toxemia with vomiting and of eclamptic toxemia. He reports three cases of toxemia with vomiting with one death, in which under the clinical picture of hyperemesis a lesion corresponding to acute yellow atrophy of the liver was found. This theory is not new, and the similarity suggesting it, has previously been commented upon by a number of authors quoted, who also reported cases with their pathological findings. There is no doubt that grave changes also occur in the kidneys and other organs, as evidenced by hemoglobinuria, albuminuria and casts; but they are of secondary importance. Stone in referring to the proof of the

greater importance of liver lesions states that eclampsia without albuminuria occurs in one-tenth of all cases, and that albuminuria may be one of the last signs. The author considers this simply a question of the stage and grade of the disease; if cases are seen at the outset of toxic symptoms the albuminuria is often absent, and in fulminating cases, death occurs without marked kidney changes. Bar, in analyses of the microscopic findings in 24 eclamptic case subjects, does not remember a single instance in which gross pathological lesions were not seen. The kidneys were profoundly affected in 4, the lesions were moderate in 9, and in 8 they were of slight intensity. The liver was affected in most cases, but not proportionately to the intensity of the kidney lesions. Some of the mildest kidney lesions were accompanied by the severest liver lesions. He concludes that the disease is due to the action of some powerful poison, which may affect the kidneys in some cases and the liver in others.

In the study of experimental necroses of the liver, Pearce has shown that these lesions may be produced by the intravenous injection of hæmagglutinins. The similarity of these experimental lesions to those of the toxemia of pregnancy with vomiting and eclamptic toxemia, as described in the review of these conditions, is evident; although that the same mechanism holds good cannot readily be proven, the observation is quite suggestive.—*Amer. Jr. Obs.* Vol. LII., 321.

THEODORE J. GRAMM, M. D.

THE MORTALITY IN OPERATIONS UPON FIBROID TUMORS OF THE UTERUS.—Baldy has contributed an article which cannot fail to attract the attention of operators. He says: Recent papers on the degeneration of fibroid tumors of the uterus, such as those by Noble, McDonald, Frederick, Hunner and others, in which claims are made for such large percentages of various degenerations and on account of which the general deduction is drawn that all fibroid tumors of whatever character should be removed, are apt to set one thinking as to other factors in these cases which may bear on the final conclusions to be adopted. His own experience differs materially from those recently expressed by Noble. He has not seen such a great number of degenerations in these tumors. What looks like a degeneration at times proves quite otherwise under the microscope. Furthermore, degeneration of the tumor does not of necessity imply either symptoms or danger. Calcareous degeneration is probably one of nature's efforts to destroy the tumor and in its results is practically harmless—it certainly in his experience adds no risk to the patient. In no case of cystic degeneration of a fibroid tumor have any symptoms other than those which usually obtain in such growths been observed by me. Myxomatous and hyaline degenerations are chiefly of interest pathologically; clinically they are of not much importance. Unless in a rare case, the conditions are not suspected before operation. Much the same holds true of edema. Necrosis and malignant degeneration are the exceptions. Even here his sympathy is largely with Bland Sutton's assertion that many cases of supposed sarcomatous degeneration of fibroid tumors have been sarcomatous from their inception. Looked at from this standpoint, the estimate made by Noble that 16% of 1,188 cases considered would without operation have died because of the degenerations in the tumors, is pure guess work, and

consequently too inexact to be accepted as a fact. His further assertion that at least one-third of the women having fibroid tumors would have died had they not been submitted to operation, is gratuitous and misleading as applied to the dangers of fibroid tumors. No one can even approximate the percentage of intercurrent diseases brought about by the chronic anæmia present in many of the cases. It might even with some degree of safety be questioned whether this ever occurred; at any rate, we have at present only assertions of this, but no reliable data as proof. As to the injurious pressure from the tumor upon the alimentary canal and urinary organs, Baldy has long been convinced that this is largely a myth. While he in some measure reached a similar conclusion as do these gentlemen as to the advisability of operating upon a large proportion of fibroid tumors which come under his observation, he does so largely, as does Dever, from the standpoint of symptoms and likewise from that of prognosis as influenced by the remote results of operations—not from any fear of the degenerations and their consequences. Like Sturmdorf in attempting to establish the indications for radical operative interference, Baldy never loses sight of the remote, as well as the immediate, results of the procedure, and in doing so he is shocked at the estimates of danger we constantly observe put forward by surgeons. He believes it is the remote results as far as the mortality is concerned which are of most importance. He then calls attention to the dangers of pulmonary embolism and degeneration of the heart muscle, and the occurrence of sudden death from these causes, which we are powerless to prevent. After all is said and done, however, most of us have arrived from one cause or another, at the same point—remove these tumors when you first see them. But personally he does not deceive himself with the belief that he can do so with a one per cent. mortality or anything like it. The earlier we can get these cases, the better will we be able to cut down the percentage of sudden deaths. The degenerations which are at the bottom of these results, be they in the blood, in the vessels, in the lungs, the heart or elsewhere, must have a beginning, and there must be a point early in the inception of the disease when their influence is at a minimum. The earlier we operate the nearer we come to this point of safety.—*Amer. Jr. Obs.* Vol. LII, 370.

THEODORE J. GRAMM, M. D.

PERNICIOUS VOMITING OF PREGNANCY.—Williams (Baltimore) had his attention particularly directed to the nature of this trouble by observing a fatal case which displayed the lesions of acute yellow atrophy of the liver. Excluding all cases in which the vomiting results from lesions outside of the generative tract, and having no essential connection with pregnancy, and which should be regarded merely as accidental complications, he considers that the evidence at present available justifies us in dividing the cases of serious vomiting of pregnancy into the following groups: Reflex, neurotic, and toxemic. Reflex vomiting may be due to the presence of abnormalities of the generative tract or ovum which existed prior to the onset of pregnancy, or are coincident with it. Among such conditions are displacements of the uterus, particularly retroflexions; ovarian tumors; certain cases of endometritis; abnormalities of the ovum such as hydatiform mole, hydramnios, and certain cases of twin pregnancy.

The occasional causal relation of the first two factors may be demonstrated by the prompt cessation of the vomiting following the replacement of the uterus or the removal of the ovarian cyst. The efficiency of endometritis as an etiological factor is not so clear, although in rare instances the findings at autopsy or upon the examination of the fetal membranes, afford presumptive evidence that it may be so considered. The abnormalities of the ovum above mentioned can bring about acute distension of the uterus, which in turn may cause reflex vomiting. Such a mode of production, however, should not be considered until after examination of the urine has demonstrated the absence of toxemia. The abnormal condition of the cervix, so frequently mentioned in the literature, should not be considered as a factor in the causation of reflex vomiting, since it is probable that the occasional cures resulting from treatment are only striking examples of the curative effect of suggestion. Many writers have contended that most, if not all, cases of vomiting of pregnancy are neurotic in origin and allied to hysteria, and are amenable to suggestive treatment. Williams considers such a view as too extreme, but believes that it holds good in many cases, since it is only by such a hypothesis that one can comprehend the surprising and rapid cures which sometimes promptly follow the employment of absolutely worthless and unphysiological remedies, as well as the effect of suggestion and the rest cure. Still, this variety of vomiting should be diagnosed only after excluding organic lesions and demonstrating the absence of toxemia, by a thorough examination of the urine. From his own experience, as well as that of Stone and Ewing, he has no hesitation in saying that in at least a certain proportion of the toxemic cases, characteristic lesions may be found at autopsy which are identical with those in acute yellow atrophy and icterus gravis. These consist in the degeneration and necrosis of the central portions of the liver lobule, and the fatty degeneration and necrosis of the secretory portions of the kidneys, and can only be explained by the assumption that some powerfully toxic substance is circulating in the blood. In eclampsia the lesions begin in the portal spaces and invade the lobule from the periphery toward the center; while in vomiting of pregnancy the necrosis begins in the center of the lobule and spreads peripherally and never involves the portal spaces. Associated with these lesions is a striking change in metabolism, which is manifested by a marked increase in the percentage of nitrogen put out as ammonia compared with the total nitrogen of the urine. In the reflex and neurotic forms of vomiting, the ammonia output remains normal, and accordingly the determination of the ammonia co-efficient affords not only a means of diagnosis between the neurotic and toxemic varieties of vomiting, but is a valuable guide to treatment. In eclampsia the total amount of nitrogen is greatly diminished, while the ammonia co-efficient remains practically normal. In vomiting, on the contrary, in spite of the scanty amount of urine, the amount of total nitrogen remains approximately normal, while the ammonia co-efficient is wonderfully elevated. Generally speaking, it may be said that a high ammonia output is a favorable prognostic sign in eclampsia, and a very ominous one in vomiting.—*Amer. Jr. Obs.* Vol. LII, 422

THEODORE J. GRAMM, M. D.

Monthly Retrospect

OF HOMOEOPATHIC MATERIA MEDICA AND THERAPEUTICS

CONDUCTED BY O. S. HAINES, M. D.

THE IMPORTANCE OF DIAGNOSIS.—We think that Dr. Kent has very distinctly stated his position in regard to the importance of Diagnosis and Pathology in practice, in a recent discussion, which we repeated for the benefit of those who assume that physicians whose principal concern is for the accuracy of the homœopathic prescription, sometimes relegate diagnosis and the pathological condition to a position which those important matters do not deserve. Dr. Kent remarked: "I do not think that a homœopathic physician, accustomed to making the best prescriptions, would ever assume that diagnosis is worthless. Diagnosis has its proper place and function, and the successful homœopathic prescriber is the only one who really knows what that is. Diagnosis is frequently the short road to the study of groups of symptoms. The homœopathic physician knows where the diagnosis is to be placed; knows its relation to other things, and values it; but always places it secondary to the prescription. About eighteen months ago, I was called out of the city to see a case that had nonplused two pretty good physicians. They had been working over the case for some time and had considered it a case of sciatica. They had been prescribing upon the symptoms, and from that standpoint alone, I do not see how they could have done better than they did. But they had overlooked something. I took hold of the leg and pulled it strongly, when the patient remarked that the traction relieved the pain. I pushed up upon the leg, and the patient said that increases the pain. This patient had been lying upon his back with the affected limb drawn up. It was not sciatica, but a case of hip-joint disease. Here was a case in which diagnosis was important. We must not ignore these important things. We cannot know too much. A broad liberal education is an absolute necessity, but all the various branches of medicine must be placed in the proper relation with each other, or otherwise homœopathy will be crowded to the wall; when it is really the one thing to which all these other things should be made subservient. The great trouble has been that we know too much about diagnosis, and not half enough about prescribing. We commend especially the last sentence of these remarks; but would like to state it in slightly different manner. The great trouble with us homœopathic physicians has been that, of late, we know too little about the art of homœopathic prescribing. The practice of this art has been relegated to a secondary position which it does not deserve.

This discussion took place at the meeting of the I. H. A., at Chicago, before the Bureau of Homœopathics, and in the remarks that followed, every speaker, without exception, expressed the opinion that diagnosis and pathology must invariably be recognized as essentials in determining which cases are medical and which are surgical in nature. It was even said that no one could be a truly successful prescriber, unless he understood pathology and fully appreciated its importance. And now, let us have a little more homœopathy in the proceedings of the American Institute, and—there you are.

HISTORY REPEATING ITSELF.—The *Recorder* calls attention to the fact that at a recent meeting of the Illinois Pharmaceutical Association, the following resolution was adopted: "Resolved, That we favor such legislation as shall require that the proper public officer, in case of death ensuing from disease or otherwise under medical attendance, when the physician himself dispensed his own medicines, shall issue the death certificate instead of the attending physician, as now permitted by law." *Critique* thinks this is a move towards the same old tyranny, that drove Hahnemann from city to city in Europe; but we cannot think this resolution was directed especially against the regular school, because almost as many allopathic physicians prescribe their own medicaments just now; especially in out of town practice.

SPLANCHNOPTOSIS.—Dr. A. L. Blackwood, in *Clinique*, has an admirable article upon this topic, discussing fully, its causes, symptoms and treatment. This is a general term applied to the drooping or sagging of the various abdominal viscera; it embraces drooping of the stomach (gastroptosis), of the intestines (enteroptosis), of the kidney (nephroptosis), of the liver (hepatoptosis), and occasionally of the spleen (splenoptosis). It is more common among women than among men. It is responsible for a very large percentage of the nervous disorders of women; hitherto attributed to the uterus and its appendages. In nearly every case there is a general neurasthenic relaxation. Remedies are occasionally of service in assisting us to relieve the neurasthenia, gastric and other symptoms which arise; but, remedies of themselves have little effect in changing the abnormal position of organs. The author has mentioned a few remedies, with their indications, which have been of service to him in his treatment of these various displacements.

Picric acid, this remedy is of service in those cases complaining of exhaustion and of being constantly "so tired." Every attempt to perform mental labor, results in a severe throbbing headache.

Phosphoric acid may be studied when the patient is unable to perform any mental or bodily exhaustion, because such exertions produce complete weakness and burning in the spine. The hair turns gray very early in life, and falls out.

Nux Vomica may be preferred when the patient must lie down after any mental or bodily exertion, because such exertions produce complete fatigue. The aggravation after being up late at night; the relief by rest and sleep are useful concomitants. When *Nux* does not give relief, we may use some form of its alkaloid, strychnia.

Ignatia Amara, is often the remedy when there is a marked tendency to hysterical manifestations. Sinking sensations in the epigastrium and craving for all kinds of indigestible articles of food are *ignatia* indications.

Coca is of great service when anæmia is a prominent factor and is dependent upon loss of vital fluids. The coca patient is irritable and low-spirited. The appetite may be fair, yet emaciation is going on continually. The spine is sensitive and there are throbbing, hammering headaches dependent upon the anæmia.

Surgical procedures are seldom of permanent benefit in these affections, when they occur in patients who are markedly neurasthenic. If surgical measures are determined upon, they should be complete in details. The displaced organs should be sutured, the gastro-hepatic omentum should be shortened, the transverse colon fixed and the abdominal wall reconstructed; otherwise the results of operation will be unsatisfactory.

HYDRAGOGIN IN NEPHRITIS WITH DROPSY.—Dr. Clifford Mitchell, *Clinique*, speaks with positiveness of the efficacy of this diuretic, claiming that his experience with it has enabled him to demonstrate its great power in reducing dropsy, in diminishing albumin, and in reducing the number of casts in the urine. The dose is from eight to ten drops, three or four times daily. Dr. Halbert, in his work upon Practice of Medicine, also praises this compound in no uncertain language. It is a compound; and, we presume, must be considered an ethical preparation, because its formula has been published. It is a mixture of digitalis and strophanthus, together with the active principles of squills and the glucoside oxysaponin. The latter is obtained from *Herniaria Glabra*. Of course all this makes one fly to the latest U. S. Dispensatory, to find out all about this *Herniaria* and this oxysaponin, but as neither this work; nor others of recent date, have anything to say, we naturally wonder where our Chicago colleagues get their information regarding such newer remedies. Is the preparation indigenous to Chicago? And why do writers fail, so constantly, to give the manufacturer's name and address; when they recommend new proprietary medicines? It is a bad habit; and it puts the readers of their articles, and the purchasers of their books, to unnecessary trouble.

Hydragogin is made in Germany, and is sold to the trade by the agents, Messrs. C. Bischoff & Co., No. 88 Park Place, New York City. It costs about a dollar for a vial so small that the manufacturers ought to be ashamed of themselves. The endorsement of Drs. Halbert and Mitchell will go very far in giving us confidence in this physiological diuretic; and, we trust that those who use it upon such recommendations will not be disappointed in it. It seems to be one of those remedies suitable for extreme conditions that will not yield to ordinary therapeutic measures. Dr. Mitchell speaks, at length of this preparation on pages 190 to 193 inclusive, of his late work:—"Diseases of The Urinary Organs." Dr. Halbert refers to his experiences with it on pages 840 and 856 of his new "Practice of Medicine." We mention these facts, because we believe those readers who are interested in new remedies, are entitled to as full information as can be given them.

TREATMENT OF PNEUMONIC FEVER, WITH SPECIAL REFERENCE TO THE DETERMINING CAUSE OF DEATH, AS RELATED TO THE HEART.—We trust everyone will read this useful and suggestive paper by Charles Gatchell, M. D. It appears in *Clinique* for October, and also in the *Transactions of The American Institute* for 1905. The author points out the often forgotten fact that pneumonic fever is more than a local affection. The systemic toxæmia is generally more deadly than the local lesions. When pneumonic fever kills, it does so in one of three ways: By interference with metabolism and damage to tissue consequent to the toxæmia; by direct interference with the respiratory and circulatory functions; and by temperature effects; these latter constituting minor features. The results of toxæmia in pneumonic fever and its effects upon the heart, must be vigilantly watched for in elderly and in delicate patients and also in those whose vitality has been damaged by previous or co-existing diseases; chronic nephritis, diabetes, chronic heart affections, pregnancy, alcoholism, privations or by modes of living. The heart signs which are of special significance in pneumonic fever are—rapidity of the pulse, smallness, weakness, irregularity and dicrotism. The elimination of the first sound and the enfeeblement of the pulmonic second sound subsequent to its exaggeration. We may only give a brief resume of the author's principles of treatment: Absolute rest, good ventilation, relief of cough and pain, avoidance of constipation, avoidance of heavy local applications, avoidance of too frequent physical examination, changes of clothing, company. The diet must be light. Milk alone during the acute stage, if it is well borne. Whey, meat juice, egg-albumin, broths; if milk is not tolerated. No starches. No sugars. Cold water is needed, but we must not burden the system with large amounts if the heart is weak. Maintain vital resistance by cold mitten frictions, after some appropriate heating process such as a fomentation, a hot blanket or a sweating pack. Elimination of the poisons by the sweating pack is often useful. Combat feeble heart by cold compress over cardiac region for fifteen minutes, every two hours. The free inhalation of pure Oxygen—large amounts and *early*. This point is well taken. Oxygen, as usually given; in small amounts and late; is worse than useless. Give alcohol freely, but do not produce toxic symptoms by it. If the pulse is slowed and its force strengthened, alcohol is acting beneficially; but, if delirium is thereby increased and the alcoholic odor is detected on the breath two hours after it has been taken; then the patient may be getting too much. Use the homœopathic remedies that combat toxæmia, rather than those suited to the local lesions within the chest. Do not get the mind fixed only upon the lungs. Give the snake poisons, arsenicum, rhus tox, muriatic acid, baptisin and the like. Such measures as have been mentioned act to *prevent* cardiac weakness. If the heart needs direct stimulation in spite of them, select adrenalin chloride, digitalis, strophanthus, caffein, strychnia or spartein sulphate. The author differentiates these and other drugs, so that the whole paper is one that is of more than usual interest. We have not fully realized the needs of pneumonia cases, and hence our mortality rate is possibly to be improved after the full importance of eliminative measures shall have become understood.

TREATMENT OF FUNGOID MYCOSIS BY THE SOLUBLE TOXINS OF THE STREPTOCOCCUS ERYSIPELATIS.—The favorable action sometimes exerted by an intercurrent erysipelas on sarcoma or cancer has been known for a long time. It is more than forty years since Bazin reported a case of *mycosis fungoides* cured during the course of the same affection. Based on these facts, Dr. Coley, after ten years, has treated several patients suffering from malignant tumors by subcutaneous injections of erysipelatoxins and from this treatment he has obtained encouraging results. It is to an analogous method, that Dr. H. Martin-Roux, of the Parish Hospitals, has recently resorted with success in a very serious case of *mycosis fungoides*. What led our confrere to make this attempt was the fact that in the patient in question, an spontaneous erysipelas had previously brought about, in a few hours, the complete disappearance of the fungoid tumors, not very numerous, it is true, but very extended and painful, some of them being located even outside the limits of the erysipelatox patch. Therefore, new tumors having appeared a short time after, Dr. Martin-Roux does not hesitate to inject subcutaneously a streptococcus culture derived from an erysipelatox patch developed on a sore of the knee, said culture being previously heated to 120°, filtered, and then heated again to 110° in sealed up tubes. The daily dose injected, which at the start consisted of a few drops, was gradually increased to 2 cc. Each pricking was followed by a very intense local reaction and left behind a large induration with erysipelatox redness of the integuments. Several series of these injections having been made in three months time, there was observed a gradual disappearance of the tumors. The healing, nevertheless, was but short-lived; two months later the tumors reappeared in the trunk, much more painful than before. The injections were resumed, but the result was this time less definite; there were alternates of amelioration and aggravation.

The condition of the patient becoming more and more alarming, it was decided to employ, in larger doses, a streptococcus bouillon of great virulence. The new pricks, notwithstanding the development of certain general phenomena (fever), did not cause a very intense reaction, and, the skin was free from the erysipelatox erythema which, till then, seemed to indicate a curative action. Dr. Martin-Roux considered already his experiment unsuccessful, when, unexpected by him, eleven days after the beginning of the last series of injections, the tumors commenced to dry up and collapsed, leaving only superficial rose-colored ulcerations. At the end of five weeks all sores had disappeared, and eleven months later the cure was complete.—*L'Art Medical*.

E. FORNIAS, M. D.

REMEDIES FOR FACIAL NEURALGIA.—According to Dr. Ch. Bernay, many cases of facial neuralgia were successfully treated by the alternation of Thuja and China. The credit of this treatment is given to Hartmann, who also mentioned in his work, Veratrum, Arsenicum, Capsicum and Mezereum. Jousset, P., according to the teachings of I. P. Tessier, recommends the alternation of Thuja and Coccus cacti for this variety of neuralgia, while Dr. L. Violet, late of the Paris Hospitals (1884), extolled Mezereum as an efficacious remedy. Besides the above mentioned remedies, Tessier found of

great value of the treatment of tic douloureux, both Atropinum Sulphate and Cuprum aceticum, 2c.—*Annals de Med. Hom. do Brazil*.

E. FORNIAS, M. D.

PROGRESS OF HOMOEOPATHY.—*La Clinique Infantile* (Allopathic Review of Paris), in the June number of this year gives the following information:

"All happens under the sun:—Homœopathy has penetrated the Palácio do Elyses, by the entrance of Dr. Crépel, who was called by M. Loubet, President of the Republic, to treat his youngest son, in a delicate state of health. This son had been previously under the care of Drs. Bouchard and Charrin, of the two great schools of medicine of Paris, whose efforts had been of no avail."

"Once in charge of the case, Dr. Crépel suspended the useless medication and a notable improvement followed the critical condition of the boy; and a trip to Montelimar did the rest."

The high-spirited Drespres used to say—everyone has the physician he deserves; and surely no one has the right to criticise the school of M. Loubet. And, moreover, it is humane, when a method fails to resort to another; as it is cruel to insist on the therapeutic failure of Dr. Bouchard, which so readily did open the doors of the Elyses to one of ours.—*Annals de Med. Hom. do Brazil*.

E. FORNIAS, M. D.

SUBCUTANEOUS INJECTIONS OF SEA WATER IN THE NEW BORN.—Starting from the opinion upheld by Dr. M. R. Quinton, that sea water, injected under the skin, favors, better than a simple solution of salt, the organic functions, Dr. Lachêze, under the direction of Dr. Quinton himself, made some interesting clinical experiments with seven new born, in one of the hospitals of Paris, and the results of his researches were given in his inaugural thesis. Here is the technique he adopted:

Sea water, recently taken from the deep (10 metres), far from any fluvial current, and under a calm weather, is brought again to isotonia by the addition of two-thirds its volume of spring water, and then sterilize in cold, with the filter of Chamberland, avoiding all contact with the metal or the caoutchouc. This is the liquid that is injected, with all the usual antiseptic care, every two or three days, 10 to 20 cc, under the skin of the supra and infra-spinous regions of the infant. If the state of the child demands it, the injections should be made at longer intervals; however, the smaller doses, frequently repeated, seem to merit the preference.

The children, on which Dr. Lachêze injected the sea water, presented at their birth a normal weight, but there were signs of hypothermia, feeble respiratory impulse, frequent absence of the movements of suction and deglutition, marked torpor, all indicating the presence of miopragics with a lessening of the vital functions. Two of these children suffered, besides, from green diarrhœa. But in all of them, the result of the treatment was, a rapid renewal of the vital activity, a great euphoria, and an amelioration of the general condition with increase of weight.—*L' Art Medical*.

E. FORNIAS, M. D.

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CONTRIBUTORS TO VOLUME XL.

- Ashcraft, Leon T., Philadelphia, Pa.
 Ashley, Maurice C., Middletown, N. Y.
 Bailey, R. A., Philadelphia, Pa.
 Baker, William F., Philadelphia, Pa.
 Bartlett, Clarence, Philadelphia, Pa.
 Bigler, Bernard E., Colorado Springs, Colo.
 Boyer, Francis W., Pottsville, Pa.
 Edgar R. Bryant, M.D., San Francisco, California.
 Buck, M. J., Pittsburg, Pa.
 Copeland, Elmer H., Northampton, Mass.
 Cranch, Edward, Ph.B., M.D., Erie, Pa.
 Cushing, A. M., Springfield, Mass.
 Deming, Ralph, Philadelphia, Pa.
 Dillow, George, A.M., M.D., New York.
 Douglass, Malcolm, Baltimore, Md.
 Fleagle, M. M., Hanover, Pa.
 Fornias, Edward, Philadelphia, Pa.
 Givens, Amos J., Stamford, Conn.
 Godfrey, James, Philadelphia, Pa.
 Golden, G. Morris, Philadelphia, Pa.
 Gramm, Theodore J., Philadelphia, Pa.
 Haines, O. S., Philadelphia, Pa.
 Hammond, W. Nelson, Philadelphia, Pa.
 Harrison, H. A., Utica, N. Y.
 Harner, D. W., Philadelphia, Pa.
 Heysinger, I. W., Philadelphia, Pa.
 Hutchinson, John C., New York City.
 James, John Edwin, Jr., Philadelphia, Pa.
 James, John E., Philadelphia, Pa.
 Korndorfer, Aug., Sr., Philadelphia, Pa.
 Knerr, Bayard, Philadelphia, Pa.
 Knowlton, W. W., Camden, N. J.
 Lane, N. F., Philadelphia, Pa.
 Lawrence, F. Mortimer, A.M., M.D., Philadelphia, Pa.
 McGeorge, Wallace, Camden, N. J.
 Marshall, R. S., Pittsburg, Pa.
 Mitchell, Clifford, Chicago, Ill.
 Moore J. Herbert, Brookline, Mass.
 Morrison, Caldwell, Newark, N. J.
 Northrop, Herbert, Philadelphia, Pa.
 Ostrom, Homer I., New York.
 Price, Eldridge, Baltimore, Md.
 Randall, Edward G., Waterville, N. Y.
 Rankin E. Guernsey, Philadelphia, Pa.
 Raue C. Sigmund, Philadelphia, Pa.
 Rile, J. Harmer, Wilmington, Del.
 Roedmann, Max, Philadelphia, Pa.
 Schneider, A. B., Cleveland, O.
 Searle, W. S., Brooklyn, N. Y.
 Shedd, P. W., New York.
 Snader, Edward R., Philadelphia, Pa.
 Sommer, Otto, Washington, D. C.
 Speakman, William W., Philadelphia, Pa.
 Stanton, Lawrence M., Philadelphia, Pa.
 Thomas Charles M., Philadelphia, Pa.
 Terry, William D., Utica, N. Y.
 Van Lennep, Gustave A., Philadelphia, Pa.
 Van Lennep, William B., Philadelphia, Pa.
 Wanstall, Alfred, Baltimore, Md.
 Wesselhoeft, Walter, Boston, Mass.
 Wilcox, Frederic R., Philadelphia, Pa.
 Wood, James C., Cleveland, O.
 Woodard, Lewis K., Westminster, Md.

